

STUDIES IN MEDITERRANEAN ARCHAEOLOGY
VOL. CXXXIX

J.R.B. STEWART
AN ARCHAEOLOGICAL LEGACY

edited by

A. Bernard Knapp, Jennifer M. Webb and Andrew McCarthy



ÅSTRÖMS FÖRLAG
UPPSALA 2013

STUDIES IN MEDITERRANEAN ARCHAEOLOGY

Volume CXXXIX

Founded by Paul Åström

Editors-in-Chief

Jennifer M. Webb David Frankel

La Trobe University, Melbourne
sima@astromeditations.com

Advisory Board

Vassos Karageorghis Carl-Gustaf Styrenius
Robert Merrillees

Editorial Board

Shlomo Bunimovitz Reinhard Jung
Jan Driessen Demetrios Michaelides
Nikos Efstratiou Edgar Peltenburg
Peter Fischer Despo Pilides
Jeannette Forsén Nancy Serwint
Maria Iacovou Joanna S. Smith

Cover image: Middle Minoan II Kamares ware cup from Crete, found by James Stewart in
Tomb 11B at Karmi *Palealona* in 1961

Published by Åströms förlag
Banérg 25 SE 752 37
Uppsala, Sweden
www.astromeditations.com

© Åströms förlag 2013
ISSN: 0081-8232
ISBN: 978-91-7081-253-8
Printed in Sweden



Frontispiece. James and Eve Stewart in Singapore, 1955 (photo courtesy of the Dorothy Evelyn Stewart Archive, University of New England)

Contents

Table of contents	v
Editors' preface, by A. Bernard Knapp, Jennifer M. Webb and Andrew McCarthy	vii
Eleanor Stewart remembered, by Robert S. Merrillees	ix
Eve Stewart on James Stewart	xiii
Bibliography: Eleanor Stewart, Eve Stewart and James R.B. Stewart, compiled with the help of Robert Merrillees, Judy Powell and Kenneth Sheedy	xv
List of contributors	xvii

Archaeology

1. Cyprus at 2200 BC: rethinking the chronology of the Cypriot Early Bronze Age, by Sturt W. Manning	1
2. Interactive communities at the dawn of the Cypriot Bronze Age: an interdisciplinary approach to Philia phase ceramic variability, by Maria Dikomitou-Eliadou	23
3. Exotica in Early and Middle Bronze Age Cyprus: exploring aspects of the secular and sacred economy, by Maria Mina	33
4. Figurines and figurative vessels at Early Cypriot Bellapais <i>Vounous</i> , by Daisy Knox	47
5. 'The mantle of Vasilia': have Stewart's views on the centrality of the copper trade in prehistoric Bronze Age Cyprus stood the test of time?, by Jennifer M. Webb	59
6. Living with the legacy of death: recent results from the multi-period site of Prasteio <i>Mesorotsos</i> , by Andrew McCarthy	73
7. 1955–2013: the necropolis of Nicosia <i>Ayia Paraskevi</i> almost 60 years after Stewart's excavations, by Giorgos Georgiou	81
8. The development and organisation of labour strategies in prehistoric Cyprus: the evidence from Erimi <i>Laonin tou Porakou</i> , by Luca Bombardieri	91
9. Early and Middle Cypriot remains at Paramali, Limassol District, by Pavlos Flourentzos	103
10. The emergence of the state on prehistoric Cyprus: J.R.B. Stewart and V. Gordon Childe, by A. Bernard Knapp	109

11. 'On a clear day the Taurus Mountains hang like a cloud': on environmental thought in the archaeology of Cyprus, by Catherine Kearns 121
12. The trouble with typologies: Stewart's pottery classifications and regional styles, by Lisa Graham 133
13. J.R. Stewart's ceramic classification: lessons from 50 years of use, by Ellen Herscher 141
14. Moving into the world: a region of southern Cyprus in the Late Bronze Age, by Alison South 149
15. The 'Cypriot Goddess' at the transition from the Bronze to the Iron Age: a 'Cypro-centric' approach, by Giorgos Papantoniou 161
16. Market strategy—Cypriot Bichrome Wheel-made ware for export, by Michal Artzy, Ragna Stidsing and Yossi Salmon 175

Biography

17. Professor J.R. Stewart—archaeologist, numismatist and soldier of Cyprus, by Robert S. Merrillees 185
18. The field records of J.R. Stewart's excavations at *Vounous*: archival material at the Medelhavsmuseet, by Kristian Göransson 195
19. James Stewart and Walter Beasley: Australia, Cyprus and the Australian Institute of Archaeology, by Christopher J. Davey 201
20. James Stewart as Nicholson Museum curator (1954–1962), by Craig Barker 211
21. The J.R.B. and D.E. Stewart archive, by Judy Powell 223
22. The legacy of Eve and James Stewart at CAARI and in the taxonomy of Cypriot Bronze Age metal, by Stuart Swiny 229

Editors' preface

The 3rd of July, 2013 marked the 100th anniversary of the birth of James Rivers Barrington Stewart, the Australian archaeologist best known for his pioneering work on the Early Bronze Age of Cyprus. Stewart conducted his first and perhaps most famous excavations (1937–38) in the cemetery of Bellapais *Vounous* on the island's north coast. As an eminent prehistorian and excavator, he established many of the typological and chronological markers that we still use today, especially in Cyprus. As a teacher and researcher, he built a strong foundation in Cypriot and Near Eastern archaeology at the University of Sydney and helped to establish important collections of Cypriot and Near Eastern materials in university departments, galleries and museums in both Australia and New Zealand. His legacy is felt strongly in eastern Mediterranean archaeology, but an honest and wide-ranging evaluation of his impact on the archaeology, the people and the institutions he touched, has never been attempted. After Stewart died at an early age in 1962, his estate was safeguarded by his widow Eve: it was under her stewardship that the Cyprus American Archaeological Research Institute (CAARI) in particular benefited from her husband's legacy. Today CAARI retains a portion of the Stewart archives and the J.R. Stewart residence honours his name.

On the weekend of 1–3 March 2013, CAARI organised a conference with the title 'J.R.B. Stewart: An Archaeological Legacy', which we have adopted for the present publication. The volume is arranged in two sections: the first is a collection of archaeological studies demonstrating how Stewart's legacy has impacted the discipline, our interpretations of prehistory and our methodologies; the second contains a number of biographical pieces about Stewart, his colleagues and the role his widow, Eve, played in sustaining his work. Part archaeology, part historiography and part biography, this volume seeks to embed Stewart's legacy into 20th century archaeological scholarship, and to identify the ties between Australia, America, Europe and the Mediterranean that he left behind. In these extensively revised papers from the CAARI conference, individual authors discuss aspects of their research that fit within the overall theme of

evaluating Stewart's legacy. Both the archaeological and biographical pieces were written exclusively for this publication.

Twenty-two scholars from Cyprus, Australia, Britain, the USA, Italy, Sweden, France and Israel present research related to the prehistoric and protohistoric periods of Cyprus and the Levant that captured James Stewart's attention. The majority of the archaeological papers are concerned with Cyprus' Early and Middle Bronze Ages, treating everything from radiocarbon chronology (Sturt Manning, Cornell University) and an environmental retrospective (Catherine Kearns, Cornell University) through site and survey reports (Luca Bombardieri, University of Torino, Italy; Giorgos Georgiou, Cyprus Department of Antiquities; Andrew McCarthy, CAARI; Pavlos Flourentzos; Alison South) and specialist studies on pottery (Michal Artzy *et al.*, University of Haifa; Maria Dikomitou-Eliadou, University of Cyprus; Lisa Graham, University of Edinburgh; Ellen Herscher), to the copper trade (Jennifer Webb, La Trobe University, Melbourne), exotica (Maria Mina, University of Cyprus), figurative representation (Daisy Knox, University of Manchester), ritual transformations (Giorgos Papantoniou, Trinity College, Dublin) and the emergence of the 'state' (A. Bernard Knapp, CAARI). Several Australian scholars (Robert Merrillees, Christopher Davey, Judy Powell, Craig Barker), along with Kristian Göransson (Medelhavsmuseet, Stockholm) and Stuart Swiny (University of Albany, New York), present papers honouring the legacy of Stewart and his wife Eve, or discussing the impact of his work and ideas on archaeology and museums in Cyprus, Australia and Europe. The volume also includes a short tribute to Eleanor Stewart, James Stewart's first wife, by Robert Merrillees.

Three aspects of the present publication warrant emphasis: the archaeology and the historiography of Cyprus and the eastern Mediterranean, and biographical work concerning James Stewart. While some biographical essays related to Stewart have been produced in recent years (e.g. papers in Barker 2012), and most recently an entire monograph (Powell 2013), most have considered distinct aspects of his life and

career. This volume brings together several of these aspects to produce a comprehensive evaluation of his life and legacy in academia and museum work in Australia, New Zealand, America, Europe and the Mediterranean, in particular on Cyprus. In addition to honouring Stewart's contributions, this retrospective account of his life and the context in which he worked should appeal to anyone interested in the history of archaeology or museum studies, as well as in the archaeology of the colonial era.

This retrospective on James Stewart, an important figure in both Cypriot and Near Eastern archaeology, also provides an historiographic overview that should help us to understand better the early stages of archaeological work in the Mediterranean and the links between scholars working in this area. The past 50 years have seen a real paradigm shift in the way we approach archaeological data, including theoretical and methodological advances as well as the sophisticated application of scientific analyses. There is a real need amongst Cypriot and Mediterranean archaeologists to take stock of what lessons from our predecessors we should continue to use and what we ought to avoid.

Several chapters focus on current archaeological fieldwork and research in Cyprus and the Levant, which will engage scholars working on interconnections in the eastern Mediterranean Bronze and Iron Ages. In addition to providing important new primary data, these studies link current research with 20th century methodological precursors in ways that illuminate both. Whilst these papers illustrate the legacy of Stewart, they also serve as a source of new primary data for anyone engaged with materiality and connectivity in the Bronze and Iron Age Mediterranean.

There are several people we wish to thank, both for their role in the conference and in the preparation of this publication. First of all, we are most grateful to the Embassy of the United States in Nicosia for providing a substantial subvention toward publication costs. Robert and Helen Merrillees sponsored a reception held at CAARI following the opening, keynote lecture delivered by Robert Merrillees. The following evening CAARI Advisory Board member Maria Kyriakou and

her husband, Athos, hosted a dinner at their home for all conference participants. On the final evening of the conference, Australian High Commissioner Trevor Peacock and his wife, Pattie, welcomed us to the High Commissioner's residence, where we were treated to impromptu digressions by Trevor Peacock and Robert Merrillees on Stewart, Australians working in Cyprus, and the Australian diplomatic character. We are especially grateful to CAARI's indispensable staff—Administrator Vathoulla Moustoukki, Librarian Katerina Mavromichalou and housekeeper Phodoulla Christodoulou—for their impeccable work on the organisation and implementation of the conference. Through such conferences, CAARI continues to serve the needs of the international archaeological community and fosters links between Cyprus, the USA, Australia and many other countries in Europe, the Middle East and around the world.

The editors also wish to express their thanks to several ASOR (American Schools of Oriental Research) scholars who provided feedback and commentary on the content and organisation of the volume (Joe Greene, Kevin McGeough, Executive Director Andrew Vaughan). Finally, Bernard Knapp and Andrew McCarthy would like to thank their co-editor Jennifer Webb, who not only facilitated the prompt publication of this volume in the *Studies in Mediterranean Archaeology* series, but also undertook the entire layout of the volume.

A. Bernard Knapp
Jennifer M. Webb
Andrew McCarthy

6 November 2013

Bibliography

- Barker, C.D. (ed) 2012: *Aphrodite's Island: Australian Archaeologists in Cyprus*, Sydney: Nicholson Museum, University of Sydney
- Powell, J. 2013: *Love's Obsession: The Lives and Archaeology of Jim and Eve Stewart*, Kent Town: Wakefield Press

List of contributors

Michal Artzy
Hatter Laboratory
Recanati Institute for Maritime Studies
University of Haifa, Haifa 31905, Israel
martzy@research.haifa.ac.il

Craig Barker
Nicholson Museum
University of Sydney, New South Wales 2006,
Australia
craig.barker@sydney.edu.au

Luca Bombardieri
Dipartimento di Studi Umanistici
Università di Torino, Via Sant'Ottavio 20, 10141
Torino, Italy
luca.bombardieri@unito.it

Christopher J. Davey
Australian Institute of Archaeology
La Trobe University, Victoria 3086, Australia
cdavey@aiarch.org.au

Maria Dikomitou-Eliadou
Archaeological Research Unit
Department of History and Archaeology
University of Cyprus, P.O. Box 20537, 1678 Nicosia,
Cyprus
m.dikom@ucy.ac.cy

Pavlos Flourentzos
1 Estias St. 2001 Strovolos, Nicosia, Cyprus
pflourentzos@yahoo.com

Giorgos Georgiou
Department of Antiquities
1 Mouseiou Avenue, 1516 Nicosia, Cyprus
ath-geo@cytanet.com.cy

Kristian Göransson
Swedish Institute of Classical Studies
Via Omero 14, 00197 Rome, Italy
goransson@isvroma.org

Lisa Graham
CAARI
11 Andreas Demetriou Street, 1066 Nicosia, Cyprus
LGraham2@staffmail.ed.ac.uk

Ellen Herscher
3309 Cleveland Avenue NW, Washington, DC 20008,
USA
herschere@yahoo.com

Catherine Kearns
120 Goldwin Smith Hall, Cornell University, Ithaca,
NY 14853-3201, USA
cmk244@cornell.edu

A. Bernard Knapp
CAARI
11 Andreas Demetriou Street, 1066 Nicosia, Cyprus
bernard.knapp@glasgow.ac.uk

Daisy Knox
Department of Archaeology
University of Manchester, Oxford Road, M13 9PL, UK
daisy.knox@manchester.ac.uk

Sturt W. Manning
Department of Classics, Cornell Institute of
Archaeology and Material Studies, and Malcolm and
Carolyn Wiener Laboratory for Aegean and Near
Eastern Dendrochronology
Cornell University, Ithaca, NY 14853-3201, USA
sm456@cornell.edu

Andrew McCarthy
CAARI
11 Andreas Demetriou Street, 1066 Nicosia, Cyprus
director@caari.org.cy

Robert S. Merrillees
'Le Mimosa', 3 Place de la République, 89660 Maily le
Château, France
phmrsm@free.fr

List of contributors

Maria Mina
Archaeological Research Unit
University of Cyprus, P.O. Box 20537, 1678 Nicosia,
Cyprus
m.mina@ucy.ac.cy

Giorgos Papantoniou
Department of Classics
Trinity College Dublin, Dublin 2, Ireland and Institute
for Mediterranean Studies, Melissinou & Nikiforou
Foka 130, P.O. Box 19, Rethymnon 74100, Crete, Greece
papantog@tcd.ie

Judy Powell
School of Social Sciences
University of Queensland, St Lucia, Queensland 4072,
Australia
judy.powell@uq.edu.au

Yossi Salmon
Hatter Laboratory
Recanati Institute for Maritime Studies
University of Haifa, Haifa 31905, Israel
yossi.salmon@gmail.com

Alison South
Vasilikos Valley Project
Kalavastos 7733, Larnaca, Cyprus
ian.alison@cytanet.com.cy

Ragna Stidsing
Hatter Laboratory
Recanati Institute for Maritime Studies
University of Haifa, Haifa 31905, Israel
rstidsing@hotmail.com

Stuart Swiny
Institute of Cypriot Studies
Department of Anthropology
University at Albany, Albany, New York 12222, USA
swiny@albany.edu

Jennifer M. Webb
Department of Archaeology, Environment and
Community Planning
School of Historical and European Studies
La Trobe University, Victoria 3086, Australia
jenny.webb@latrobe.edu.au

The development and organisation of labour strategies in prehistoric Cyprus: the evidence from Erimi *Laonin tou Porakou*

Luca Bombardieri

Abstract

An archaeological approach to investigating the development of labour organisation strategies is undoubtedly important, as is the interpretation of their possible causes and effects within the social dynamics of a prehistoric community. The economic organisation of Early Bronze Age rural communities in Cyprus provides important evidence of subsistence production and consumption, basically restricted to immediate household members, and highlights a gradual process toward greater privacy and separation over time, as documented at Marki *Alonia*. During the Middle Bronze Age, a different picture emerges in a few industrial sites, where the gradual functional specialisation of workplaces and work tasks and times seems to run parallel to an increasing need for controlling spaces related to work and storage. The development of workplaces, tasks and times hints at a general transition from working inside to outside houses and, while no evidence of institutionalised (or centralised) control of wealth is attested, different forms of cooperative and communal decision-making may have been emerging.

Introduction

The ongoing excavations in the workshop complex and domestic units at Erimi *Laonin tou Porakou* have revealed interesting evidence for analysing the developmental dynamics of Cypriot communities during the Middle Bronze Age (MBA). Specifically, the identification of a workshop complex, its spatial and functional relation with domestic units, and an understanding of the architectural elements within it provide, together with the distribution of residual artefacts, the basis for interpreting the possible nature of the community (and economy) of Erimi *Laonin tou Porakou*. This chapter focuses on the economic and social significance of the workshop complex within Erimi's community life and on the wider background of the organisation of labour strategies in prehistoric Cyprus.

First I present a brief overview of the main problems and proposed models related to the prehistoric organisation of labour, in order to assess a general archaeological problem: what are the key elements to be evaluated in order to understand developmental trends in labour organisation strategies? Having raised these issues and introduced the evidence regarding prehistoric Cypriot communities, I move on to examine the specific case of Erimi *Laonin tou Porakou* and then discuss some aspects of labour organisation within this MBA community.

Developments in labour organisation strategies in prehistoric communities

It is difficult to provide a complete picture of labour strategies from any analysis of the limited archaeological datasets associated with preliterate societies. Nor can one directly apply general economic principles in investigating a prehistoric community. Nevertheless, theoretical debates in social anthropology have proposed models to interpret general trends in the organisational development of prehistoric labour strategies, particularly regarding the division of labour (e.g. Tentori 2009, with further references; Smith 1993).

Émile Durkheim's (1893) traditional theory of social solidarity, for example, is based on a diachronic analysis of developments in the division of labour. According to the French social scientist, who wrote within the evolutionary framework of his predecessors (and in particular Herbert Spencer), a more 'primitive' community is characterised by a 'mechanical solidarity', which connects the individual to the society without any intermediary, while the bond that binds the individual to society is a shared belief system. In Durkheim's view, a natural development leads to more complex communities, wherein individual members become increasingly unique and distinguishable from each other. Solidarity becomes more organic as these communities develop their division of labour, and each member has a distinct role or action. Durkheim's model emphasises the importance of increases in the

volume and density of population as well as in the number and efficacy of the means of communication (Filloux 1970; Thompson 2003: 76), arguing that eventually labour starts to become divided if one or more of these elements appear.

Some of these aspects have entered more recent discussions on the organisation of labour and its development. In an analogous vein, the definition of informal and formal institutions drawn by North (1990; see also Spigelman 2012) makes an insightful distinction between institutions based on socially agreed upon shared responsibility for enforcement and institutions based on codified constraints, which include those officials responsible for enforcement.

Nowadays, social scientists as well as archaeologists, while generally discarding deterministic arguments and introducing interpretative categories such as 'adaptation' and the 'multilinear evolution' of early societies, do consider the progressive differentiation within the organisation of labour as a significant marker of social development in ancient communities (e.g. Steward 1979; Lenski 1984; D'Altroy & Earle 1985: 187, with references).

Directing this problematic toward a longer-term perspective, whilst also treating the increasing number of elements in the division of labour, might well be adapted to the study of prehistoric communities. In general, we might assume that the labour strategy of a prehistoric community can be identified by contrasting some distinctive and correlated organisational aspects, as follows:

The workplace

The basic contrast is between formal and informal workplaces, respectively fashioned as spaces exclusively devoted to work activities (even intended for specific and repeated work sessions), on the one hand, and spaces used for different activities (not necessarily or solely related to the work sphere), on the other.

Work tasks

The contrast is between generic and specialised work. In a formal workplace, the practice of assigning particular tasks and activities to individual workers or groups is the opposite of a generalised approach to work structure, typical of informal workplaces, in which each worker participates in a broad range of activities.

Working time

The contrast is between working time and leisure. In a formal workplace, where specific work tasks and work sessions are performed in dedicated spaces, the balance between working and non-working time becomes more evident than in an informal workplace. In diachronic perspective, the concept of working time itself can be considered a progressive acquisition strictly related to the formalisation of a workplace and the specialisation of work tasks, and vice-versa.

Thus, if and when the individual worker, or group,

repeatedly employs a portion of their time (whatever the pattern, on a daily, monthly or yearly basis) for a specific work task in a specific workplace, then the generic concept of 'work' can be gradually modified into the composite 'going to, staying at and coming back from work'. These changes, rather than simple variations of time and space, appear as evidence of significant social developments in a prehistoric community.

Organisation of labour and the community on Bronze Age Cyprus

An archaeological approach to investigating developments in the organisation of labour strategies is undoubtedly necessary, as is an interpretation of their possible causes and effects within the social dynamics of a prehistoric community and its network of relationships.

The archaeologically defined transition from the Chalcolithic to the Bronze Age on Cyprus corresponds with a period of dynamic transformation (Peltenburg 1996; Frankel & Webb 1998; Frankel 2000; Bolger 2007; Webb & Frankel 1999, 2007; Knapp 2013: 263–277). The evidence for numerous new habits and techniques argues for the appearance of communities on the island at this time with a distinctively different pattern of behaviour. Webb and Frankel's research persuasively demonstrates that these new 'Philia' communities shared a distinct *habitus* that both distinguished them from Chalcolithic communities and laid the foundations for a homogeneous cultural development through the Early Bronze Age (EBA) to the MBA.

The introduction of new agricultural techniques (e.g. the ox-drawn plough, cattle and donkeys), as well as extractive and productive technologies (particularly associated with the exploitation of copper resources), marks a significant shift in people's relations with the landscape and with their own as well as other communities. New work activities enabled an initial spread of settlement into areas considered irrelevant or unattractive to Chalcolithic people, and facilitated a gradual increase in agricultural production as well as a growth in population.

This long-term process characterises the second half of the third millennium BC and had important effects on the organisation of labour. The nine-phase stratigraphic sequence argued for Marki *Alonia* (Frankel & Webb 2006a: 35–37), which covers over 500 years of occupation from the Philia phase to Middle Cypriot (MC) II, represents a key source of data for investigating this issue in a diachronic perspective.

If we focus on the three basic elements mentioned above (workplaces, work tasks and working times), the data from Marki *Alonia* reveal a significant and dynamic picture of the organisation of labour. In

general, while architectural compounds at Marki vary considerably in size and composition, the residential units maintain a domestic function and no systemic differences in household function can be identified (Frankel & Webb 2006a, 2006b, 2012; Webb 2009). As to the characteristics of workplaces, the location of working installations and the distribution of artefacts at Marki suggest that basic activities—spinning and weaving, small-scale storage, the processing of cereals and chipped and groundstone tool production—were all routinely carried out either in enclosed courtyards or in inner rooms, along with food preparation, consumption and sleeping (Frankel & Webb 2012: 486). This general picture of informal workplaces, where diverse work activities share the same space with other domestic tasks, is also documented at EC III Sotira *Kaminoudhia* (Swiny *et al.* 2003) and at Alambra in MC I–II (Gjerstad 1926: 19–27; Stewart 1962: 215; Coleman *et al.* 1996: 327–328 with references; Georgiou 2008).

Within this general framework, however, the evidence from Marki shows significant change through time (Frankel & Webb 2006a: 313–315; 2006b, 2012; Webb 2009). During Philia Phases A and B the number and size of facilities associated with courtyards suggest that they were shared between several households. Evidence for a range of tasks, including the working of chipped stone, bone, antler, shell and perhaps hides, further suggests that courtyards were routinely used as outdoor work spaces by mutually dependent and closely related households (Frankel & Webb 2006a: 313). By EC II, in Phase D, the changing nature of courtyard activities implies that some work tasks performed there in the earlier Philia and EC I periods (Phases A–C) either were no longer carried out or else were moved to other spaces (Frankel & Webb 2006a: 313; 2012: 484). This has been interpreted as evidence of increasing economic specialisation and a greater diversity of household types, perhaps directly related to an increase in population in the village. Also in Phase D, a formal north–south laneway was built across the excavated area of the settlement. Decisions of this sort are likely to have involved multiple households and suggest a degree of communal decision-making in relation to the organisation and negotiation of working time and tasks among members of the community.

Despite these changes, the evidence related to the distribution of work tasks and patterns of working time at Marki suggests a coherent picture of a rural community with a household-based organisation of labour. The household served as the primary unit of production. The recovery of clay and stone polishing and burnishing tools, as well as the presence of over-fired or mended ceramic containers, strengthens arguments for a limited part-time specialisation in pottery production, in which particular households produced relatively small quantities of pottery for local consumption (Frankel & Webb 2006a: 152). Similarly,

the distribution of querns and rubbers suggests small-scale food production and consumption at a household level, along with the manufacture of lithics and textiles, the latter documented by the broad distribution of metal and bone needles, clay spindle whorls and loomweights. This suggests a relatively low level of differentiation of work tasks and possibly in specific working times.

The recent comprehensive publication of the excavations by Dikaios at Ambelikou *Aletri* casts new light on the organisation of work activities at an industrial site during MC I–II (Webb & Frankel 2013). The two main areas excavated (Areas 1 and 2) clearly indicate a focus on different industrial activities (metalworking and pottery production). The primary use of the site for metalworking is suggested by the location of the settlement in the immediate vicinity of a copper ore body (Constantinou & Panayides 2013: 11). It is clear, however, that the hilltop of *Aletri* was also used for domestic purposes, as both fill deposits and trial trenches produced a typical repertoire of domestic items (spindle whorls, loomweights, hobs, cooking pots) (Webb & Frankel 2013: 222–223). A contemporary cemetery at nearby *Theotokos* also suggests permanent settlement (Webb & Frankel 2013: 222).

While the co-existence of discrete workshop areas intended for the production of pottery and metals at Ambelikou has been known for some time (Merrillees 1984), a closer analysis of the installations and artefacts found within Areas 1 and 2 and elsewhere on the site has revealed that multiple processes involved in both copper exploitation (mining, smelting, melting and casting) and pottery manufacture were carried out there. The association of ceramic and metallurgical workshops, both of which involve activities that produce unpleasant odours, and their location away from residential areas, is not surprising. The workshops in Areas 1 and 2 may be considered formal workplaces, given over to specific activities and separated from domestic structures.

Extensive working of the bedrock in order to create floors and benches, along with possible evidence for a terrace system in Area 2, further suggest a degree of cooperative planning and possibly the use of communal labour (Webb & Frankel 2013: 222). Together the evidence for specialised industrial activity and cooperative planning at Ambelikou suggests significant distinctions in work tasks and schedules among community members at this site.

Bronze Age mining and pottery manufacture in Cyprus are generally viewed as temporary or seasonal activities, alternating with periods dedicated to agriculture or other tasks (Raber 1987; Knapp 1998, 2003: 569; Kassianidou & Knapp 2005; see Webb & Frankel 2013: 221, with references). This model of a seasonal balance of work schedules stands in apparent contrast with the evidence of permanent settlement and intended long-term site use at *Aletri*, although

it remains unclear whether the pottery produced in Area 2 was 'made by a resident potter or by an itinerant potter or potters with permanent facilities (including a kiln) in the village to which they returned annually' (Webb & Frankel 2013: 222). Webb and Frankel (2013: 223) suggest that the metal industry at Ameblikou was a 'mobilized, local industry' (following Raber 1987: 302), something in between seasonal occupation and a state-organised, large-scale industry. The development of such a pattern of work activities within a permanent settlement may have allowed the gradual emergence of formal workplaces, a specialised labour force and a dynamic scheduling of work times and tasks.

Workshop production is also evident elsewhere in the MC period, most notably in relation to metalworking. At Politiko *Troullia* West, finished metal artefacts are scattered amongst domestic debris in both an alley and courtyard, but the clearest evidence of metalworking (tongs, crucibles, a mould and slag) is concentrated in an exterior workspace at Politiko *Troullia* East, which may have been isolated spatially from other structures in the settlement (Falconer & Fall 2013: 104).

At Pyrgos *Mavroraki* discrete workplaces used for metalworking, textile manufacture, perfume-making and scented oils processing, as well as olive oil and wine production, have been identified in the same industrial area (Belgiorno 2011). Drawing on the evidence from Ambelikou *Aletri*, it may be suggested that *Mavroraki* was primarily a metalworking site during the MC period, if not earlier, as its location near an ore body at Ambelia *Dhimmata* would appear to indicate. The wide distribution of installations and tools used for copper smelting, casting and refining (Keswani 2005: 387; Belgiorno 1998; Giardino 2002) suggests the presence of integrated, formal workplaces and the employment of a specialised labour force.

Until recently, evidence for work-related activities during the late stages of the MC period was largely based on single or partially exposed settlement contexts at Kalopsidha (Gjerstad 1926: 27–37; Åström 1966; Webb 2009, 2012; Crewe 2010) and Episkopi *Phaneromeni*—the latter mostly in Area G, since the more extensive MC III–Late Cypriot (LC) I settlement investigated in Area A awaits full publication (Carpenter 1981: 60, 63). New data, however, now provide a more detailed picture of what appear to have been significant developments during the last phase of the MBA.

An industrial area at Kissonerga *Skalia*, with a building complex spread over 550m² in MC III, is of particular interest (Crewe & Hill 2012). The deposits here indicate an open-air working area with a series of installations used for heating or drying. In Area B, pits and ash dumps typical of an earlier phase were replaced with a large mud-plaster structure (Feature 33) with interior ashy deposits, interpreted as a beer-producing installation. Here we see a development

from an informal array of pits to the construction of a central feature and its associated courtyard. The arrangement of this complex and the location of Feature 33 within it offer clear evidence of a planned building program, while embedded mortars and narrow pits in Area G/G2 suggest further industrial activities. To the southeast, furthermore, a sequence of domestic structures dated to EC III–MC II reveals a distinction between residential and working areas. Both the spatial arrangement and the scale of construction here suggest a formal workplace devoted to industrial, rather than household, activities. According to Crewe and Hill (2012: 234), it may reflect '... an environment in which work feasts took place, providing beer (and perhaps also food) in large quantity as payment for services, potentially even the construction of the new complex itself'. Together with the evidence from Atheniou (discussed below), this may indicate the increasing importance of work feasts in the Bronze Age. It is also highly suggestive of a division in work tasks and times at Kissonerga *Skalia*.

Two further cases hint at peculiar contexts of labour organisation. Kalopsidha *Koufos* and Atheniou *Bamboulari tis Koukounninas* were both occupied during LC I (Merrillees 1971; Dothan & Ben-Tor 1983; Crewe 2010; Webb 1999: 21–29, 113–116; 2012). Despite a lack of intact building remains, both sites produced extensive ceramic assemblages. Miniature juglets and small cups, widely attested in both, have been interpreted as votives (Webb 1999: 22–29, 115–116; 2012: 6). The presence of animal bone fragments, lumps of ore and slag, crucibles, moulds, small bronzes and unfinished metal objects (including 300kg of metallic waste) from Atheniou, together with the specialised ceramic repertoire, have been seen as possible evidence of feasting within the context of a cult related to the exploitation of copper ores (Karageorghis 2011; Webb 2012: 6; Spigelman 2012: 142). Although this evidence does not allow us to form any firm hypothesis about the formalisation of workplaces, such an interpretation may indicate the allocation of specific work tasks and a possible segmentation of work times.

The case of Politiko *Phorades* reveals a more complex situation, perhaps typical of the Late Bronze Age. Both the regional survey record and excavations at the site of *Phorades* hint at the involvement of a wider regional community (Knapp 2003), one in which relationships between the smelting site (*Phorades*), agricultural and related production sites (Aredhiou *Vouppes*, Analiondas *Palioklichia*) and a series of other industrial sites formed an homogeneous network of discrete workplaces and perhaps involved the specialised organisation of labour (Steel 2009; Webb & Frankel 1994). Since the smelting of copper most likely took place during downtime in the agricultural calendar, a seasonal pattern in the organisation of work schedules may also be indicated (Knapp 2003: 569–570).

Labour organisation strategies at Erimi Laonin tou Porakou

The site and its occupational sequence

Erimi Laonin tou Porakou has been investigated since 2008 by an Italian Archaeological Mission, as a joint project of the Universities of Torino and Firenze in collaboration with the Department of Antiquities of Cyprus. The ancient site lies on a high plateau on the eastern Kouris riverbank facing the modern Kouris dam, on the border between the modern villages of Ypsonas and Erimi, in a position that offers a wide and unobstructed view over the river valley and the coast (Fig. 1).

Recent fieldwork has confirmed two main periods of occupation (Periods 1 and 2). At this point the best documented is the earlier Period 2, which dates from the end of the EBA to the end of the MBA. Two phases are attested within the Period 2 sequence (Phases A and B); the following Period 1 occupation follows a lengthy hiatus, and is related to a sporadic use of the area during the Hellenistic and Roman periods.

The Bronze Age settlement appears to have occupied two main areas, of different use and function, located on sloping limestone terraces. A workshop complex is located on the top of the hill (Area A), while the first lower terrace is occupied by domestic units

(Area B). Two distinct clusters of tombs, extending respectively south (Area E) and east (Vounaros cluster) of the workshop and the domestic quarter, are contemporary with the settlement (Bombardieri *et al.* 2012; Christofi *et al.* 2014).

The earliest material so far documented at Erimi Laonin tou Porakou has been found in the southern and eastern cemetery areas and in particular in Tombs 231, 240, 248 and Vounaros Tomb 35. Intact burial deposits including more than 35 objects were recovered from unlooted Tombs 231 and 240. The ceramic assemblage from Tomb 231 includes a gourd juglet (Bombardieri 2012a: fig. 15) of a type similar to vessels found in EC III–MC I contexts elsewhere (Frankel & Webb 2006a: 125, text fig. 4.44: P13047; Webb *et al.* 2007: 120, n. 52; Herscher 2003: 180, fig. 4.10, P105). Thus current evidence suggests a date within EC III or MC I for the establishment of the settlement. MC I–III material is well documented in stratified deposits from the workshop complex (units SA I–III), from collapse episodes within domestic units in Area B, and in burial contexts in both the southern and eastern funerary areas (Tombs 228, 230, 248, Vounaros Tomb 1). The presence of Black Slip II and Red Polished ware two-handled jars and globular jugs with distinctive incised decoration suggests abandonment of the Period 2 settlement in MC III (Bombardieri 2012b, with references). The small object repertoire is typical

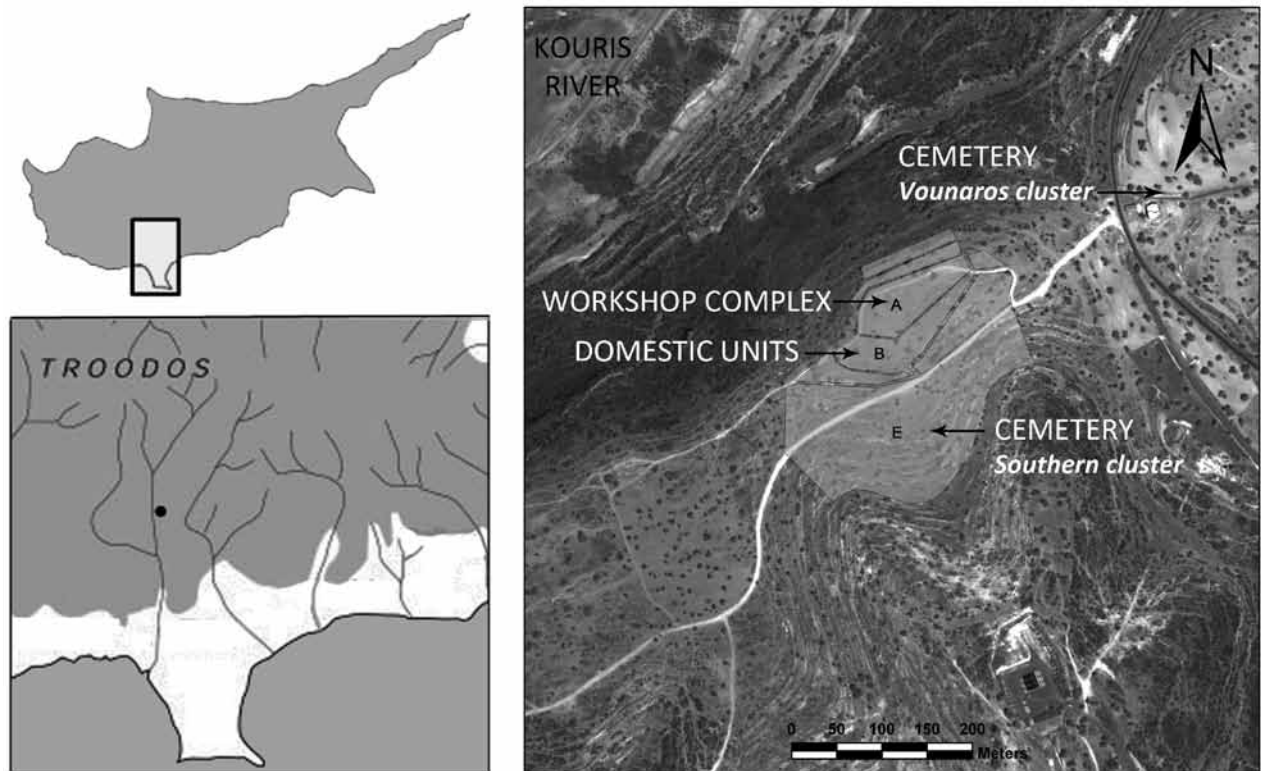


Figure 1. Erimi Laonin tou Porakou, location and topography. On the left, the location of the site; on the right, the locations of the workshop complex (Area A), domestic units (Area B) and funerary clusters (Area E and Vounaros), shown on an Ikonos II satellite image

of the south coast region of Cyprus during the MBA. In particular, the spindle whorl assemblage from the workshop complex and contemporary burial contexts are of standard south coast Middle Cypriot shape and decoration (Crewe 1998: figs A2.28, A2.31–32; Swiny 1986: figs 68–70). Picrolite disks and pendants, also typical of the south coast region, were found in both workshop and funerary deposits (Bombardieri *et al.* 2012: 95; figs 8–9; see also Swiny 1986: 17; fig. 20 [Episkopi *Phaneromeni*]; Herscher & Swiny 1992: 81, fig. 3.5–6 [Lophou *Chomatsies South*]; Violaris *et al.* 2014: fig. 8 [Lophou *Koulouzou*]; Karageorghis 1967: 306, fig. 89 [Limassol *Katholiki*]).

The workshop complex and the domestic units

Moving from the use of neutral terms, such as ‘complex’ and ‘unit’, to the more social ‘workplace’ and ‘household’ involves a significant shift in understanding and a discussion of the organisation of workplaces, work tasks and working times at Erimi *Laonin tou Porakou* during the two phases of Period 2. In doing so, we need first to be confident that our identification of the workshop complex (Area A) and residential units (Area B) is correct.

As mentioned above, the excavation of Area A revealed a production complex, which currently extends over an area of 25x25m (Fig. 2). The space is functionally organised into 11 ‘units’ (as currently excavated): five open-air working areas (WA I–V), three wide, roofed areas (SA I–SA III) and three

additional rooms, as yet not fully excavated, to the east and west of SA I–III. Residual artefact assemblages, together with installations and palaeobotanical data (Bombardieri *et al.* 2014a), suggest that the complex is to be identified as a workshop for the production of textiles, in which activities including spinning, weaving and dying were carried out.

Investigations in Area B exposed the foundations of a domestic unit arranged around a partially excavated rectangular courtyard (Court 4); the area measures at least 9.5 by 5m (Figs 3–4). Three large rooms were revealed extending to the north (Rooms 2, 3 and 5). The general picture is of a complex of roofed spaces and open areas, linked by entrances and passages. Court 4 appears to have been functionally associated with several roofed spaces. Rooms 2, 3 and 5 all overlook Court 4. The central and northern area of Room 2 was almost completely occupied by large square pits (or basins) (Features 14, 15, 17) and deep post-holes (Features 12, 13) cut in the bedrock. Given the density of rock-cut features, use of this small room may only have been possible if temporary (wooden?) covers were placed over the square pits. Finally, a very substantial bench cut in the limestone bedrock (Feature 1) abuts the northern wall with two large shallow, plastered circular basins in its surface. Investigation of Room 2 showed two phases of use during the MBA. This sequence, however, was not marked by superimposed use and abandonment deposits. In fact the Phase B rock-cut and clay features of Room 2 were reused in Phase A, with minor

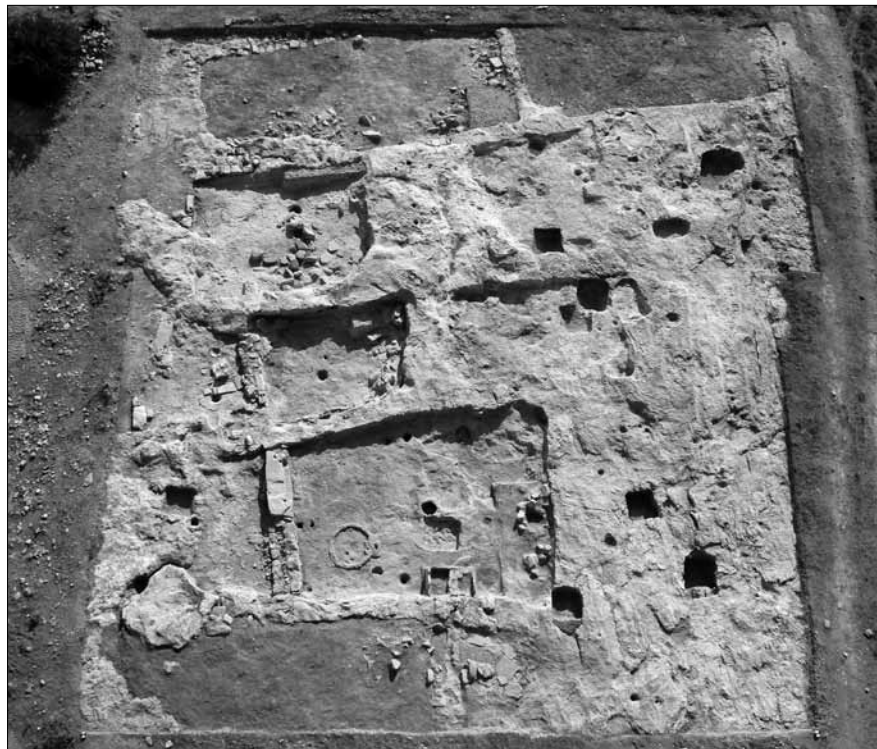


Figure 2. Erimi *Laonin tou Porakou*. Workshop complex (Area A) from the east

renovations and the addition of new structures built with stone slabs.

Characterising the workplaces

A peculiar building technique was used both in the workshop complex and in the domestic units. The rectangular rooms are carved into the limestone bedrock, creating slightly underground floors. The limestone bedrock has also been carefully worked to construct a series of basins with varying depths and openings, as well as flow channels and emplacements. The structural elements (installations and work places) and residual artefacts (tools, containers, special purpose vessels) connected with storage and working activities, and their spatial distribution within the complex, have been analysed in order to characterise and understand the nature and development of this work space. Installations include hearths/ovens/kilns, benches, basins and channels, while grinding equipment, chipped stone tools, spindle whorls and weights attest to various types of work-related activities. In particular, emplacements and bins, as well as *pithoi* and large closed vessels, suggest a significant storage capacity. Analysis of both the structural and residual artefact data suggests changes in the use of the workshop area over time (Bombardieri *et al.* 2014b).

A number of functional markers related to work activities are evident during the earlier Phase B (Fig. 5). At this time, SA I contained bins, shallow basins and a large circular hearth (Feature 42) in the southeast corner of the room. These installations were associated with decorated Red Polished ware spindle whorls and

chipped and ground stone tools. The only evidence for storage is the circular emplacement (Feature 44), located along the eastern edge of the room, which probably held a storage vessel, as appears to have been the case with similar emplacements at Marki and

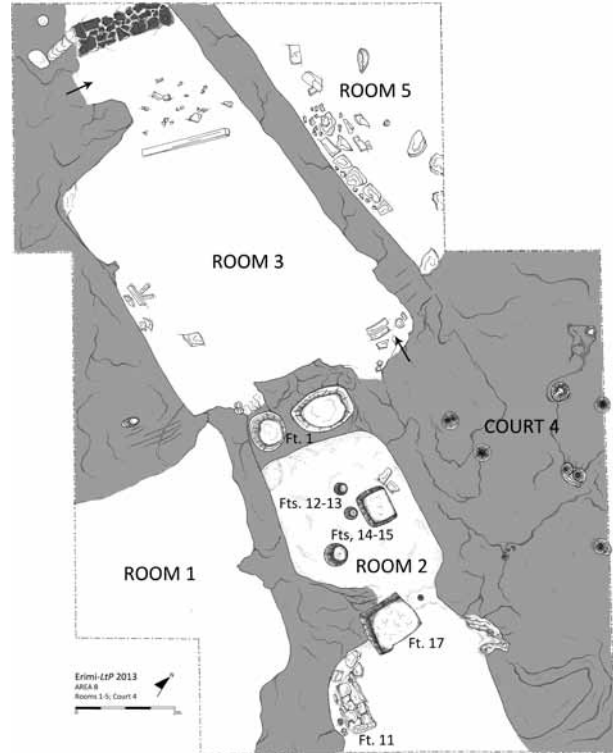


Figure 4. Erimi Laonin tou Porakou. Domestic unit. Rooms and court 1–5, showing Features

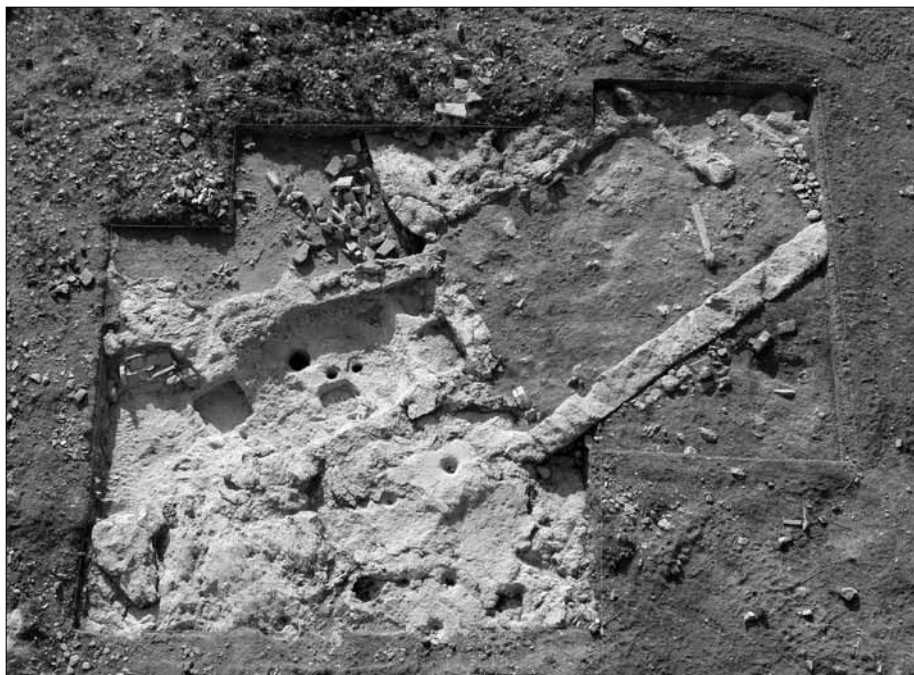


Figure 3. Erimi Laonin tou Porakou. Domestic unit (Area B) from the east

elsewhere (Frankel & Webb 2006a: 13–14).

In Phase A the evidence suggests a significant change in the function of SA I (Fig. 6). There was now a much greater emphasis on storage, as indicated by large *pithoi* and other storage vessels, and the emplacements (Features 1, 3), located along the northern limit of the room, which are circular constructions of medium/large-size stones built to support Red Polished and Drab Polished ware *pithoi* and guarantee their stability (Bombardieri 2012a).

Interpreting the evidence

The change in the nature of the workshop complex from Phase B to Phase A suggests that during the earlier Phase B, work and storage activities were combined within a limited space (e.g. in SA I), while in the more recent Phase A this area was used primarily for storage purposes. This may indicate an increasing degree of functional specialisation during the life of this complex. This process is not attested in the domestic units (e.g. Room 2), where the same structures were apparently in use throughout the two phases, with no

evidence of a functional reinterpretation of individual spaces.

The move toward an increasing specialisation in the use of space in the workshop complex is matched by changes in building techniques and materials. While clay and plaster were the most common building materials during the earlier Phase B, dressed limestone is the dominant structural material in Phase A. These changes in construction techniques are, however, visible in both the workshop complex and domestic units.

In other respects, the layout and use of work and storage installations (e.g. basins, bins and emplacements) in the workshop complex and the domestic units appear to have developed differently through time. For example, while both SA I in the workshop complex and Room 2 in the domestic area can be considered multifunctional rooms during Phase B, in Phase A SA I took on a more formal role as a dedicated storage facility, while Room 2 continued to be used as an informal workplace. Since the basins needed to be covered in order to allow access to Room 2, it would appear that they were not intended for

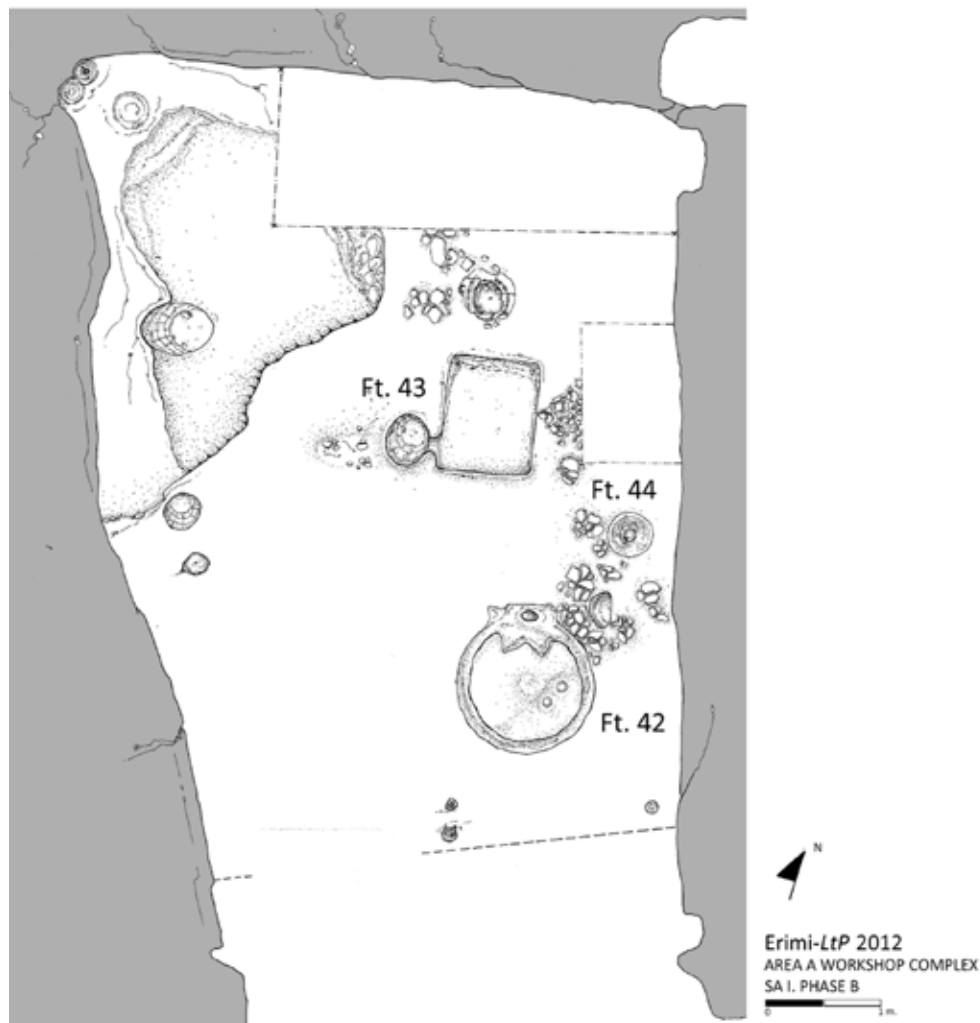


Figure 5. Erimi Laonin tou Porakou. Workshop complex. SA I. Phase B

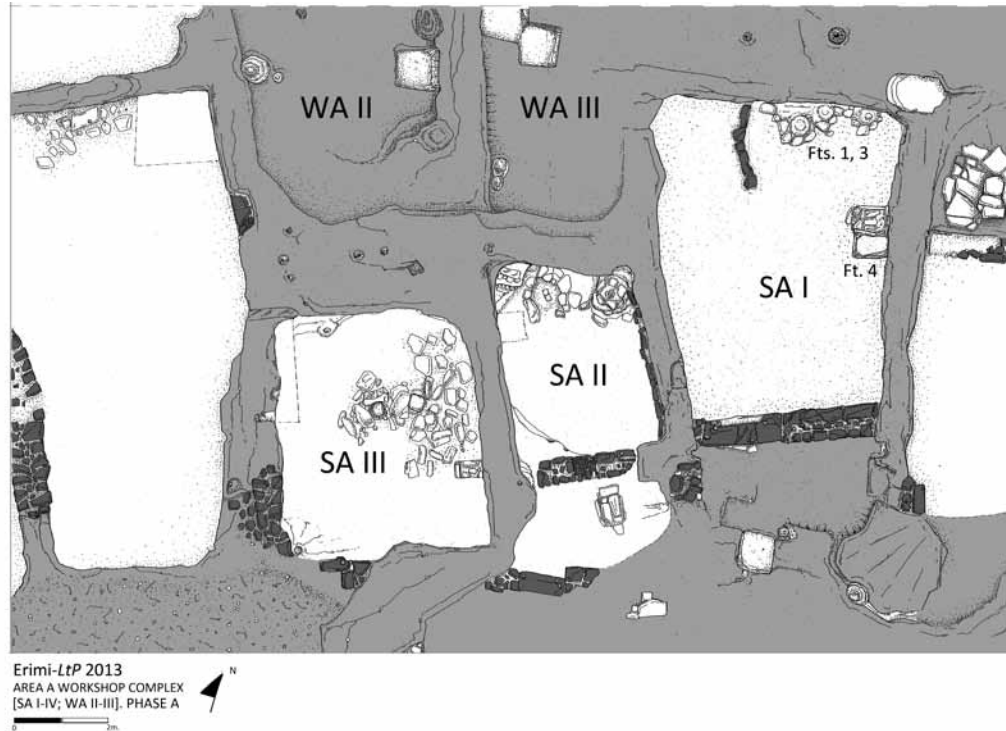


Figure 6. Erimi Laonin tou Porakou. Workshop complex. SA I–III. Phase A, showing Features

full-time use and consequently that the space was employed for a variety of domestic purposes.

The increase in the use of specialised installations and in the dedication of space to particular activities suggests an increasing division of tasks among community members at Erimi *Laonin tou Porakou*. This may be related to the increasing importance of particular industrial activities at the site and of the workshop complex itself. The planning of the complex on the top of the hill and the extensive cutting of the bedrock involved in its design and construction (Bombardieri *et al.* 2014b) also suggest significant cooperative activity and a degree of expertise and labour organisation likely to have involved authority and decision-making at a supra-household level.

The spatial separation of domestic and workshop areas at Erimi, the complexity of the initial building operations and the increasing formalisation of workplaces over time suggest a growing emphasis on communal work spaces and activities and an increasing specialisation of work tasks and schedules within the community. This aspect of the evidence uncovered to date at Erimi is of considerable interest.

Conclusions

The picture presented above is preliminary and remains to be confirmed by further excavations at Erimi *Laonin tou Porakou* and other MBA sites. At this point, however, developments through this period in the use and function of the workshop complex at

Erimi suggest a process of increasing specialisation and formalisation in work and storage activities within discrete spaces. This may have led to increased work performances and higher levels of production and is likely to have involved dedicated, specialised labour. It was accompanied by changes in building techniques within both the workshop complex and domestic units that reflect a trend towards the use of more stable structures. At the same time, the spatial segregation of houses and work spaces at Erimi in both Phases B and A suggests that at this site industrial tasks were planned and carried out beyond the level of the individual household from the early years of the MBA. Changes in the construction and use of specific rooms within the workshop complex from Phase B to Phase A may further reflect an increasing need or desire for security and a growing emphasis on the control of spaces for storage.

While the economic organisation of Early Cypriot rural communities appears to have been based on subsistence production and consumption, with the control of resources and stored products restricted to immediate household members, as primarily documented at Marki *Alonia* (Frankel & Webb 2012: 489), during the MBA and primarily in its later phases, a phenomenon of increasing ‘industrialisation’ seems evident at several sites on the island. The picture which is emerging at Erimi *Laonin tou Porakou* and elsewhere suggests an increasing functional specialisation of workplaces and work tasks and schedules, which seems to run in parallel with an increasing need for control over work and storage facilities. While there

is no evidence for institutionalised (or centralised) control of wealth, this certainly suggests that new forms of supra-household production activities and possibly communal decision-making were emerging.

Acknowledgments

I am grateful to the organisers of the conference, to Bernard Knapp for his comments on the text and to Jenny Webb for her comments and fruitful discussion on this topic. The archaeological research project at Erimi *Laonin tou Porakou* is conducted with the scientific collaboration of the Department of Antiquities of Cyprus. I wish to express my gratitude to the Department's directors for granting official permission, and to colleagues and staff in the District Archaeological Museum at Limassol. Their support greatly aided the research. For their valuable contributions, thanks are also due to the following team members and specialists: Marialucia Amadio, Mara Faggi, Francesca Chelazzi and Francesca Dolcetti.

Bibliography

- Åström, P. 1966: *Excavations at Kalopsidha and Ayios Iakovos in Cyprus (SIMA 2)*, Lund: Swedish Cyprus Expedition
- Belgiorno, M.R. 1998: Pyrgos: a metallurgical site of the Early–Middle Bronze Age on the south coast of Cyprus, in *The Italian Archaeological and Archaeometric Activities in Cyprus*, 9–30, Rome: Consiglio Nazionale delle Ricerche
- Belgiorno, M.R. 2011: *Cipro all'inizio dell'Età del Bronzo. Realtà sconosciute della comunità industriale di Pyrgos/Mavroraki*, Rome: Gangemi
- Bolger, D. 2007: Cultural interaction in 3rd millennium B.C.E. Cyprus: evidence of ceramics, in S. Antoniadis & A. Pace (eds), *Mediterranean Crossroads*, 162–186, Athens: Pierides Foundation
- Bombardieri L. 2012a: Excavations at Erimi-*Laonin tou Porakou*: 2009 preliminary report, *Report of the Department of Antiquities, Cyprus*, 139–167
- Bombardieri L. 2012b: Detecting a sequence: stratigraphy and chronology of the workshop complex at Erimi-*Laonin tou Porakou*, in A. Georgiou (ed), *Cyprus: An island Culture. Society and Social Relations from the Bronze Age to the Venetian Period*, 48–64, Oxford: Oxbow
- Bombardieri, L., C. Scirè Calabrisotto, F. Chelazzi & E. Albertini 2012: Dating the contexts (or contextualizing the datings?): new evidences from the southern cemetery at Erimi-*Laonin tou Porakou*, *Cahiers du Centre d'Etudes Chypriotes* 41, 87–108
- Bombardieri, L., M. Amadio & F. Chelazzi 2014a: Working with water. Procurement, consumption and water-based working activities at Erimi-*Laonin tou Porakou* (EC–LC I workshop complex), in I. Hadjikyriakos & M. Trentin (eds), *Proceedings of the 10th Annual Meeting of Postgraduate Cypriote Archaeology (POCA X), Venice, October 28th–30th 2010*, Oxford: Oxbow. In press
- Bombardieri, L., M. Amadio and M. Faggi 2014b: Development in building activity, materials and techniques of the Early to Middle Cypriote architecture: the case of the workshop complex at Erimi-*Laonin tou Porakou*, in C. Vonhoff & H. Matthäus (eds), *Proceedings of the 11th Annual Meeting of Postgraduate Cypriote Archaeology (POCA XII), Erlangen, 23–25 November 2012*, Cambridge: Cambridge Scholars Publishing. In press
- Carpenter, J.R. 1981: Excavations at Phaneromeni: 1975–1978, in J.C. Biers & D. Soren (eds), *Studies in Cypriote Archaeology (Institute of Archaeology Monograph 18)*, 59–78, Los Angeles: UCLA Institute of Archaeology
- Christofi, P., E. Stefani & L. Bombardieri 2014: Bridging the gap: long-term use and re-use of Bronze Age funerary areas at Ypsonas-Vounaros and Erimi-*Laonin tou Porakou*, in C. Vonhoff & H. Matthäus (eds), *Proceedings of the 11th Annual Meeting of Postgraduate Cypriote Archaeology (POCA XII), Erlangen, 23–25 November 2012*, Cambridge: Cambridge Scholars Publishing
- Coleman, J.E., J.A. Barlow, M.K. Mogelonsky & K.W. Schaar 1996: *Alambra. A Middle Bronze Age Settlement in Cyprus. Archaeological Investigations by Cornell University 1974–1985 (SIMA 118)*, Jonsered: Paul Åströms Förlag
- Constantinou, G., & I. Panayides 2013: The mining geology of Cyprus with special reference to Ambelikou Aletri, in J.M. Webb & D. Frankel, *Ambelikou-Aletri. Metallurgy and Pottery Production in Middle Bronze Age Cyprus (SIMA 138)*, 11–24, Uppsala: Åströms Förlag
- Crewe, L. 1998: *Spindle Whorls. A Study of Form, Function and Decoration in Prehistoric Bronze Age Cyprus (SIMA Pocket-book 149)*, Jonsered: Paul Åströms Förlag
- Crewe, L. 2010: Rethinking Kalopsidha: from specialisation to state marginalisation, in D.L. Bolger & L. Maguire (eds), *The Development of Pre-state Communities in the Ancient Near East: Studies in Honour of Edgar Peltenburg*, 63–71, Oxford: Oxbow
- Crewe, L. & I. Hill 2012: Finding beer in the archaeological record: a case study from Kissonerga-Skalia on Bronze Age Cyprus, *Levant* 44, 205–237
- D'Altroy, T. & T. Earle 1985: Staple finance, wealth finance, and storage in the Inka political economy, *Current Anthropology* 26, 187–206

- Dothan, T. & A. Ben-Tor 1983: *Excavations at Athienou 1971–1972 (Qedem 16)*, Jerusalem: Institute of Archaeology, Hebrew University
- Durkheim, E. 1893: *De la division du travail social: étude sur l'organisation des sociétés supérieures*, Paris: Felix Alcan
- Falconer, S.E. & P.L. Fall 2013: Household and community behavior at Bronze Age Politiko-Troullia, Cyprus, *Journal of Field Archaeology* 38, 101–119
- Filloux, J.-C. 1970: *Emile Durkheim. La Science Sociale et l'Action*, Paris: Presses Universitaires de France
- Frankel, D. 2000: Migration and ethnicity in prehistoric Cyprus: technology as *habitus*, *European Journal of Archaeology* 3, 167–187
- Frankel, D. & J.M. Webb 1998: Three faces of identity: ethnicity, community and status in the Cypriot Bronze Age, *Mediterranean Archaeology* 11, 1–12
- Frankel, D. & J.M. Webb 2006a: *Marki Alonia: An Early and Middle Bronze Age Settlement in Cyprus. Excavations 1995–2000 (SIMA 123.2)*, Sävedalen: Paul Åströms Förlag
- Frankel, D. & J.M. Webb 2006b: Neighbours: negotiating space in a prehistoric village, *Antiquity* 80, 287–302
- Frankel, D. & J.M. Webb 2012: Household continuity and transformation in a prehistoric Cypriot village, in B.J. Parker & C.P. Foster (eds), *New Perspectives on Household Archaeology*, 473–500, Winona Lake, Indiana: Eisenbrauns
- Georgiou, G. 2008: The settlement of Alampra-Mouttes revisited, *Report of the Department of Antiquities, Cyprus*, 133–144
- Giardino, C. 2002: Prehistoric copper activity at Pyrgos, *Report of the Department of Antiquities, Cyprus*, 19–32
- Gjerstad, E. 1926: *Studies on Prehistoric Cyprus*, Uppsala: Uppsala Universitets Årsskrift
- Herscher, E. 2003: The ceramics, in S. Swiny, G. Rapp & E. Herscher (eds), *Sotira Kaminoudhia: An Early Bronze Age Site in Cyprus (American Schools of Oriental Research Archaeological Reports 8. Cyprus American Archaeological Research Institute Monograph Series 4)*, 145–210, Boston: American Schools of Oriental Research
- Herscher, E. & S. Swiny 1992: Picking up the pieces. Two plundered Bronze Age cemeteries, in G.C. Ioannides (eds), *Studies in Honour of Vassos Karageorghis*, 69–86, Nicosia: A.G. Leventis
- Karageorghis, V. 1967: Chronique des fouilles et découvertes archéologiques à Chypre en 1966, *Bulletin de Correspondance Hellénique* 91, 275–370
- Karageorghis, V. 2011: A metallurgical feast?, in P.P. Betancourt & S.C. Ferrence (eds), *Metallurgy: Understanding How, Learning Why. Studies in Honor of James D. Muhly*, 30–40, Philadelphia: INSTAP Academic Press
- Kassianidou, V. & A.B. Knapp 2005: Archaeometallurgy in the Mediterranean: the social context of mining, technology, and trade, in E. Blake & A.B. Knapp (eds), *The Archaeology of Mediterranean Prehistory*, 215–251, Oxford: Blackwell
- Keswani, P.S. 2005: Death, prestige, and copper in Bronze Age Cyprus, *American Journal of Archaeology* 109, 341–401
- Knapp, A.B. 1998: Social approaches to the archaeology and anthropology of mining, in A.B. Knapp, V.C. Pigott & E. Herbert (eds), *Social Approaches to an Industrial Past: The Archaeology and Anthropology of Mining*, 1–23, London: Routledge
- Knapp, A.B. 2003: The archaeology of community on Bronze Age Cyprus, *American Journal of Archaeology* 107, 559–580
- Knapp, A.B. 2013: *The Archaeology of Cyprus: From Earliest Prehistory Through the Bronze Age*, Cambridge: Cambridge University Press
- Lenski, G.E. 1984: *Power and Privilege: A Theory of Social Stratification*, Chapel Hill: University of North Carolina Press
- Merrillees, R.S. 1971: The early history of Late Cypriote I, *Levant* 3, 56–79
- Merrillees, R.S. 1984: Ambelikou-Aletri: a preliminary report, *Report of the Department of Antiquities, Cyprus*, 1–13
- North, D.C. 1990: *Institutions, Institutional Change, and Economic Performance*, Cambridge: Cambridge University Press
- Peltenburg, E. 1996: From isolation to state formation in Cyprus, c. 3500–1500 B.C.E., in V. Karageorghis & D. Michaelides (eds), *The Development of the Cypriot Economy from the Prehistoric Period to the Present Day*, 17–44, Nicosia: Lithographica
- Raber, P. 1987: Early copper production in the Polis region, western Cyprus, *Journal of Field Archaeology* 14, 297–312
- Smith, V.L. 1993: Humankind in prehistory: economy, ecology, and institutions, in T.L. Anderson & R.T. Simmons (eds), *The Political Economy of Customs and Culture*, 1–27, Lanham, Maryland: Rowman & Littlefield
- Spigelman, M.D. 2012: Copper and cult in Bronze Age Cyprus, in A. Georgiou (ed), *Cyprus An Island Culture: Society and Social Relations from the Bronze Age to the Venetian Period*, 133–152, Oxford: Oxbow
- Steel, L. 2009: Exploring regional settlement on Cyprus in the Late Bronze Age: the rural hinterland, in I. Hein (ed), *The Formation of Cyprus in the 2nd*

- Millennium BC. *Studies in Regionalism During the Middle and Late Bronze Ages (Contributions to the Chronology of the Eastern Mediterranean 20)*, 135–145, Wien: Österreichische Akademie der Wissenschaften
- Steward, J.H. 1979: *Theory of Culture Change: The Methodology of Multilinear Evolution*, Urbana: University of Illinois
- Stewart, J.R. 1962: The Early Bronze Age in Cyprus, in P. Dikaios & J.R. Stewart, *Swedish Cyprus Expedition Volume IV, Part 1A. The Stone Age and the Early Bronze Age in Cyprus*, 205–401, Lund: Swedish Cyprus Expedition
- Swiny, S. 1986: *The Kent State University Expedition to Episkopi Phaneromeni. Part 2 (SIMA 74.2)*, Nicosia: Paul Åströms Förlag
- Swiny, S., G. Rapp & E. Herscher (eds) 2003: *Sotira Kaminoudhia: An Early Bronze Age Site in Cyprus (American Schools of Oriental Research Archaeological Reports 8. Cyprus-American Archaeological Research Institute Monograph Series 4)*, Boston: American Schools of Oriental Research
- Tentori, T. 2009: *Elementi di Antropologia Economica*, Roma: Armando
- Thompson, K. 2003: *Readings from Emile Durkheim*, London, New York: Routledge
- Violaris, Y., C. Scirè Calabrisotto, M. Fedi, L. Caforio & L. Bombardieri 2014: The Bronze Age cemetery at Lophou-Koulauzou (Cyprus): towards a cross-analysis of radiocarbon data and funerary assemblages from burial contexts, in L. Bombardieri, A. D'Agostino, G. Guarducci, V. Orsi & S. Valentini (eds), *Identity and Connectivity. Proceedings of the 16th Symposium on Mediterranean Archaeology*, Oxford: Archaeopress. In press
- Webb, J.M. 1999: *Ritual Architecture, Iconography and Practice in the Late Cypriot Bronze Age (SIMA Pocket-book 75)*, Göteborg: Paul Åström Förlag
- Webb, J.M. 2009: Keeping house: our developing understanding of the Early and Middle Cypriot household (1926–2006), *Medelhavsmuseet: Focus on the Mediterranean* 5, 255–267
- Webb, J.M. 2012: Kalopsidha: 46 years after SIMA Volume 2, in J.M. Webb & D. Frankel (eds), *Studies in Mediterranean Archaeology: Fifty Years On (SIMA 137)*, 49–58, Uppsala: Åströms Förlag
- Webb, J.M. & D. Frankel 1994: Making an impression: storage and surplus finance in Late Bronze Age Cyprus, *Journal of Mediterranean Archaeology* 7, 5–26
- Webb, J.M. & D. Frankel 1999: Characterizing the Philia facies: material culture, chronology and the origin of the Bronze Age in Cyprus, *American Journal of Archaeology* 103, 3–43
- Webb, J.M. & D. Frankel 2007: Identifying population movements by everyday practice: the case of third millennium Cyprus, in S. Antoniadou & A. Pace (eds), *Mediterranean Crossroads*, 189–216, Athens: Pierides Foundation
- Webb, J.M. & D. Frankel 2013: *Ambelikou-Aletri. Metallurgy and Pottery Production in Middle Bronze Age Cyprus (SIMA 138)*. Uppsala: Åströms Förlag
- Webb, J.M., D. Frankel, S.W. Manning & D.A. Sewell 2007: Psematismenos-Koliokremmos/Palia Tomb PKK/94, *Report of the Department of Antiquities, Cyprus*, 105–132