

This pdf of your paper in *Communities in Transition: The Circum-Aegean Area during the 5th and 4th Millennia BC* belongs to the publishers Oxbow Books and it is their copyright.

As author you are licenced to make up to 50 offprints from it, but beyond that you may not publish it on the World Wide Web until three years from publication (January 2021), unless the site is a limited access intranet (password protected). If you have queries about this please contact the editorial department at Oxbow Books (editorial@oxbowbooks.com).

COMMUNITIES IN TRANSITION

AN OFFPRINT FROM
COMMUNITIES IN TRANSITION
THE CIRCUM-AEGEAN AREA DURING THE 5TH AND 4TH MILLENNIA BC

Edited by

SØREN DIETZ,
FANIS MAVRIDIS,
ŽARKO TANKOSIĆ
and
TURAN TAKAOĞLU.

Hardback Edition: ISBN 978-1-78570-720-9

Digital Edition: ISBN 978-1-78570-721-6 (epub)

 **OXBOW** | books

© Oxbow Books 2018
Oxford & Philadelphia
www.oxbowbooks.com

Published in the United Kingdom in 2018 by
OXBOW BOOKS
The Old Music Hall, 106–108 Cowley Road, Oxford OX4 1JE

and in the United States by
OXBOW BOOKS
1950 Lawrence Road, Havertown, PA 19083

© Oxbow Books and the individual authors 2018

Hardback Edition: ISBN 978-1-78570-720-9
Digital Edition: ISBN 978-1-78570-721-6 (epub)

A CIP record for this book is available from the British Library and the Library of Congress

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopying, recording or by any information storage and retrieval system, without permission from the publisher in writing.

Printed in the United Kingdom by Short Run Press
Typeset in India by Lapid Digital Services, Chennai

For a complete list of Oxbow titles, please contact:

UNITED KINGDOM
Oxbow Books
Telephone (01865) 241249, Fax (01865) 794449
Email: oxbow@oxbowbooks.com
www.oxbowbooks.com

UNITED STATES OF AMERICA
Oxbow Books
Telephone (800) 791-9354, Fax (610) 853-9146
Email: queries@casemateacademic.com
www.casemateacademic.com/oxbow

Oxbow Books is part of the Casemate Group

Front cover: Ships carved into a rock from the site of Strophilas on Andros (photograph from the personal archive of C. Televantou); drawing of a rock carving from the main bastion on the wall at the site of Strophilas on Andros representing a procession of ships (drawing by C. Televantou).

Contents

<i>Preface</i>	ix
<i>Acknowledgements</i>	x
<i>List of contributors</i>	xi
<i>List of sites</i>	xii
<i>Introduction</i>	xiv
PART I. INTRODUCTORY AND OVERARCHING STUDIES	
1. Inventing the Final Neolithic <i>Colin Renfrew</i>	3
2. Transformation and changes at the end of the Neolithic <i>Kostas Kotsakis</i>	12
3. Village nucleation and centralisation in the Later Neolithic of South-Eastern Europe: A long-term, comparative approach <i>William A. Parkinson, William P. Ridge and Attila Gyucha</i>	17
4. Greece in the 5th and 4th millennia B.C.: Researching the “missing” 4th millennium <i>Ioannis Aslanis</i>	27
5. The shadowy “proto-Early Bronze Age” in the Aegean <i>John E. Coleman and Yorgos Facorellis</i>	33
6. Casting doubts on metallurgy and the transition to social complexity: The evidence from the Aegean <i>Maria Mina</i>	67
PART II. THE BALKANS	
7. Settlement pattern changes during the Central Balkans Copper Age <i>Aleksandar Kapuran, Aleksandar Bulatović and Dragan Milanović</i>	77
8. Modelling the black box: Bulgaria in the 4th millennium BC <i>Inga Merkyte</i>	89
9. Possible approaches to tracing the fate of the population of the Varna, Kodjadermen-Gumelnița-Karanovo VI and Krivodol-Sălcuța cultures <i>Petya Georgieva</i>	95
10. Kozareva Mogila: A settlement and necropolis in the West Black Sea region <i>Petya Georgieva, Margarita Popova and Veselin Danov</i>	107
11. The Chalcolithic settlement at Varhari: A production and trade centre in the Eastern Rhodope Mountains <i>Kamen Boyadzhiev and Yavor Boyadzhiev</i>	120
12. The latest Late Chalcolithic settlement at Tell Yunatsite: Plan and architectural remains <i>Velichka Matsanova and Tatyana Mishina</i>	128

13. Late Chalcolithic cult tables from Tell Yunatsite, Bulgaria <i>Stoilka Terzijska-Ignatova</i>	140
14. Rethinking the absolute chronology of the South-Eastern Balkans in the latter half of the 5th and in the 4th millennium BC <i>Mariusz Kufel and Łukasz Pospieszny</i>	148
15. Graphite and carbon: Relative and absolute chronology between the Aegean and the Black Sea in the 5th millennium BC <i>Agathe Reingruber</i>	155
16. Lithic technology in the region between the Lower Danube and Marmara in the 6th and 5th millennia BC <i>Ivan Gatsov and Petranka Nedelcheva</i>	178
17. Synchronisation of the Albanian and North Aegean Late Neolithic periods: New data from the lakeside dwelling of Kallamas (Albania) <i>Cécile Oberweiler, Gilles Touchais and Petrika Lera</i>	185

PART III. NORTH GREECE AND THESSALY

18. The chronological and social dimensions of the Late Neolithic I–II and the Late Neolithic–Early Bronze Age transitions in a long-lived settlement in Northern Greece (Dikili Tash, Kavala district) <i>Zoī Tsirtsoni, Pascal Darceue, Haido Koukouli-Chryssanthaki, Dimitra Malamidou and René Treuil</i>	197
19. Transformations of space in the Late Neolithic settlements of Northern Greece: Review of the evidence from Makriyalos and Thermi <i>Maria Pappa</i>	211
20. Visviki Magoula, Thessaly: Reconsidering cultural change from the Arapi to the Dimini phase <i>Eva Alram-Stern</i>	217
21. The role of the Theopetra cave in Thessaly, Greece, at the end of the Neolithic: Habitual or symbolic use? <i>Nina Kyparissi-Apostolika</i>	227
22. Beyond transition: Tracing eventfulness behind the Middle Neolithic–Late Neolithic ceramic divide <i>Stella Katsarou</i>	234
23. The beast with many heads: Assembling bodies and changing history in the 5th millennium BC <i>Stratos Nanoglou</i>	242

PART IV. WEST, CENTRAL AND SOUTH GREECE

24. Demographic transitions from the Earlier Neolithic stages until the first Early Bronze Age settlements in the plains and hill-country of Boeotia, Greece <i>John Bintliff and Kalliope Sarri</i>	249
25. Late Neolithic traditions: Evidence from Sarakenos Cave <i>Adamantios Sampson and Vagia Mastrogiannopoulou</i>	260
26. Lion's Cave, Hymettus Mountain, Attica: Figurines, structures and material culture associations <i>Lilian Karali, Fanis Mavridis and Dimitris Lambropoulos</i>	269
27. The Later Neolithic use of the cave Oinoe IV, at Marathon (Attica, Greece): Preliminary report <i>Alexandra Mari</i>	283
28. The end of the Neolithic in East Attica: New data from Kontra Gliate (Kiapha Thiti) and Thorikos Mine 3 <i>Margarita Nazou</i>	289
29. The Kastria/Pangali group and the beginning of the Chalcolithic in Southern Greece <i>Søren Dietz and Pernille Bangsgaard</i>	296
30. Tracing social changes in the Late Neolithic/Final Neolithic transition at Drakaina Cave, Kephallonia, Western Greece <i>Georgia Stratouli and Odysseas Metaxas</i>	305

31. Caves and the landscape of Late Neolithic to Early Helladic I Greece: Comparing excavation and survey data from the Peloponnese <i>Daniel J. Pullen</i>	314
32. New evidence for the beginning of habitation at Aigeira, Achaia (Greece) <i>Walter Gauss</i>	323
33. Stones, pots ... and now ornaments: Revisiting the Middle–Late Neolithic and the Late–Final Neolithic transitions at Franchthi <i>Catherine Perlès</i>	331
34. The Early Helladic I cemetery at Kalyvia in Ancient Elis <i>Jörg Rambach</i>	341
35. Long-distance exchange of obsidian: Diachronic changes at the cave site of Alepotrypa, Greece <i>Danielle J. Riebe</i>	350
PART V. AEGEAN ISLANDS, CRETE AND CYPRUS	
36. Ayios Ioannis, Thasos: The economy of a small coastal site dated to the second half of the 4th millennium BC <i>Stratis Papadopoulos, Ourania Palli, Sophia Vakirtzi and Eleni Psathi</i>	357
37. The Neolithic to Chalcolithic transition on the island of Gökçeada (Imbros) <i>Burçin Erdoğan</i>	367
38. Land management in the Final Neolithic/Early Bronze Age Aegean? Some tantalising indications from Southern Euboea <i>Žarko Tankosić</i>	373
39. The Later Neolithic cultures of the Aegean archipelago with special reference to the Cyclades: Connecting strategies of space use <i>Fanis Mavridis</i>	381
40. Strofilas, Andros: New perspectives on the Neolithic Aegean <i>Christina A. Televantou</i>	389
41. The Late Neolithic and Final Neolithic phases on Kos and the Alasarna settlement pattern <i>Mercourios Georgiadis</i>	397
42. Settlement patterns and social organisation in Crete during the Final Neolithic and the beginning of the Bronze Age (ca. 3700–3000 BC) <i>Krzysztof Nowicki</i>	405
43. The introduction of pressure blade technologies into Crete in the late 4th millennium BC: Where, how, and to what end? <i>Tristan Carter</i>	415
44. The earliest phase of the Final Neolithic at Phaistos in a wider Cretan context: New perspectives <i>Serena Di Tonto</i>	420
45. The Final Neolithic–Early Minoan I transition in South-Central Crete: New data from Phaistos <i>Simona Todaro</i>	426
46. Gavdos, or living on the southernmost Aegean island in the Neolithic cultural horizon <i>Katerina Kopaka and Efthimis Theou</i>	441
47. The entry of Cyprus into the circum-Aegean world and the growth of regionalism on the island <i>Edgar Peltenburg</i>	456
48. Rethinking the “Cypriot paradox”: Socio-economic change in Late Neolithic and Chalcolithic Cyprus <i>Ioannis Voskos</i>	466
PART VI. WEST ANATOLIA	
49. The Middle Chalcolithic period in the Troad: A new look from Gülpınar <i>Turan Takaoglu and Abdulkadir Özdemir</i>	479

50. On marble, conical rhyta: New evidence from Yeşiltepe in the West Anatolian hinterland <i>Turan Takaoğlu and Onur Bamyacı</i>	491
51. The Chalcolithic period at Yeşilova Höyük <i>Zafer Derin and Tayfun Caymaz</i>	499
52. What follows the Late Neolithic occupation in Central-Western Anatolia? A view from Ulucak <i>Özlem Çevik</i>	506
53. The Chalcolithic of Coastal Western Anatolia: A view from Liman Tepe, İzmir <i>Rıza Tuncel and Vasıf Şahoğlu</i>	513
54. Interaction as a stimulus? Çukuriçi Höyük and the transition from the Late Chalcolithic period to the Early Bronze Age in Western Anatolia <i>Barbara Horejs and Christoph Schwall</i>	530
55. Prehistoric culture at Çine-Tepecik and its contribution to the archaeology of the region <i>Sevinç Günel</i>	538
56. Cave habitations in Chalcolithic Lycia: The case of Tavabaşı near Tlos <i>Taner Korkut, Gül Işın and Turan Takaoğlu</i>	548
57. At the crossroads: Changing Chalcolithic settlement patterns in Phrygia <i>Ali Umut Turkcan</i>	556
<i>Bibliography</i>	567

Preface

The volume before you represents a collective effort that brings together scholars from different countries and backgrounds united by a common interest in the transition between the Neolithic and the Early Bronze Age in the lands around the Aegean. We chose a title containing the word “communities” because we think that the changes that occurred in the 5th and 4th millennia in south-eastern Europe and western Anatolia changed the way people were organised, how they understood their place in society, and how they interacted with other social entities on a day-to-day basis. The Neolithic community was transformed, at some places incrementally and at others rapidly, into one that was, by the end of this period, more similar to what we would commonly associate with the Bronze Age.

Terminology used to describe this period presented a special topic for consideration. Many different names (e.g. Final Neolithic, Chalcolithic, Eneolithic, Late Neolithic [I]–II, Copper Age) are used by colleagues with different scholarly backgrounds. To some extent, they reflect diverse archaeological evidence from varied geographical regions. During this long heterogeneous period spanning two millennia, developments occurred that led to significant changes in material culture, use of space, adoption of metallurgical practices, establishment of far-reaching interaction and exchange networks, and increased social complexity. The 5th and 4th millennia BC transition, notwithstanding the variability inherent in a section of prehistory this long, is one of inclusions, entanglements, connectivity, and exchange of ideas, raw materials, finished products and, quite possibly, worldviews and belief systems.

Largely, we kept the nomenclature used for regional archaeological cultures to show the variety and differences

related to the period. However, after some deliberation, we settled on using the general term “Later Neolithic Stages” (not to be confused with the Late Neolithic phase) to describe the chronological focus of the conference itself. By using this somewhat neutral term, we wished to both advertise the focus on the fourth and later part of the 5th millennium as crucial for understanding the entire period and the intention to not include the earlier phases of the Late Neolithic or the developed phases of the Early Bronze Age, unless particularly pertinent to the discussion. The title of the volume, we felt, should be even more neutral and inclusive, which is the reason why we settled on the definition of the period in purely chronological terms. Inclusiveness was also high on the list of our priorities when organising the conference; we selected participants based purely on the criterion of scientific contribution.

Most of the papers presented here are multifaceted and complex in that they do not deal with only one topic or narrowly focus on only a single line of reasoning or group of data. Hence, it was difficult to section them off into meaningful chapters based exclusively on their thematic content. After much consideration, we settled on geography as the overarching principle by which to structure this book, as being the least contentious and controversial. Hence, the papers are arranged in a roughly north–south direction (i.e., the Balkans, northern Greece and Thessaly, west, central, and southern Greece, the Aegean Islands, Crete and Cyprus and west Anatolia), preceded by introductory and synthetic contributions that either transcend regional divisions, span more than one region or address general topics related to this period. We, however, provide an overview of the papers according to their topical and thematic character in the introduction to this volume.

Acknowledgements

The list of people who contributed to the success of the conference, which had more than 130 participants, and the succeeding volume of this size and scope is necessarily very long. Unfortunately, we cannot thank everyone individually here but we are truly grateful to them all and we strongly believe that without them this work would not have been possible.

We, of course, first and foremost thank all the participants and contributors to the conference for finding the time in their busy schedules to take part in the event. We wish to particularly thank the Danish Institute at Athens, which provided institutional support and a side venue for the conference and for recognising its scholarly potential. Dr Popi Sarri was irreplaceable as the conference secretary and her tireless and enthusiastic work was essential for holding together the various practicalities of conference organisation.

We thank Dr Maria Vlazaki Andreadaki, the current General Secretary of Culture at the Hellenic Ministry of Culture and Sports, who greeted the conference on behalf of the Ministry, and the Embassy of the Republic of Turkey and the Royal Danish Embassy in Athens for organising a reception for all conference participants.

The Acropolis Museum at Athens provided the main conference venue. Our volunteers, namely Paschalis Zafeiriadis, Vasiliki Anevlavi, Athina Gerochristou, Alexandra Koutsoulou, Dimitris Lambropoulos, Georgia Loukopoulou, Eleni Papadopoulou, Irini Paraskevopoulou and Zaneta Tsambi ensured the smooth running of the conference.

An excellent pool of anonymous reviewers, consisting of an international group of scholars established in the field, safeguarded the high scientific standards of the contributions to this volume. Ms Danaï Vlachou was responsible for the visual identity of the conference, a job she performed marvelously, and our proofreader, Ms Freya Evenson, is responsible for the high linguistic quality in papers mostly written by authors whose first language is not English.

Economic support for the conference was provided by The Danish Research Council for the Humanities, INSTAP, the Institute of Cross-Cultural and Regional Studies, University of Copenhagen and the Danish Institute at

Athens. We are grateful for their support and understanding. The publication of this book was sponsored by INSTAP, the Danish Institute at Athens, Consul General Gösta Enboms Foundation, and the Department of Cross-Cultural Studies, University of Copenhagen.

We thank our colleague Christina Televantou for graciously providing the images from her excavation project at Strophilas on Andros to use for the cover of this book.

And finally, the members of the Organising and Scientific Committees provided invaluable advice and served as a pool of reviewers for the paper contributions.

Organising Committee

Søren Dietz, The Danish Institute at Athens
Fanis Mavridis, Ministry of Culture and Sports, Greece
Žarko Tankosić, Norwegian Institute at Athens/Indiana University
Turan Takaoğlu, Çanakkale Onsekizmart University
Burçin Erdoglu, Trakya University
Vasif Şahoğlu, Ankara University
Ingolf Thuesen, University of Copenhagen.

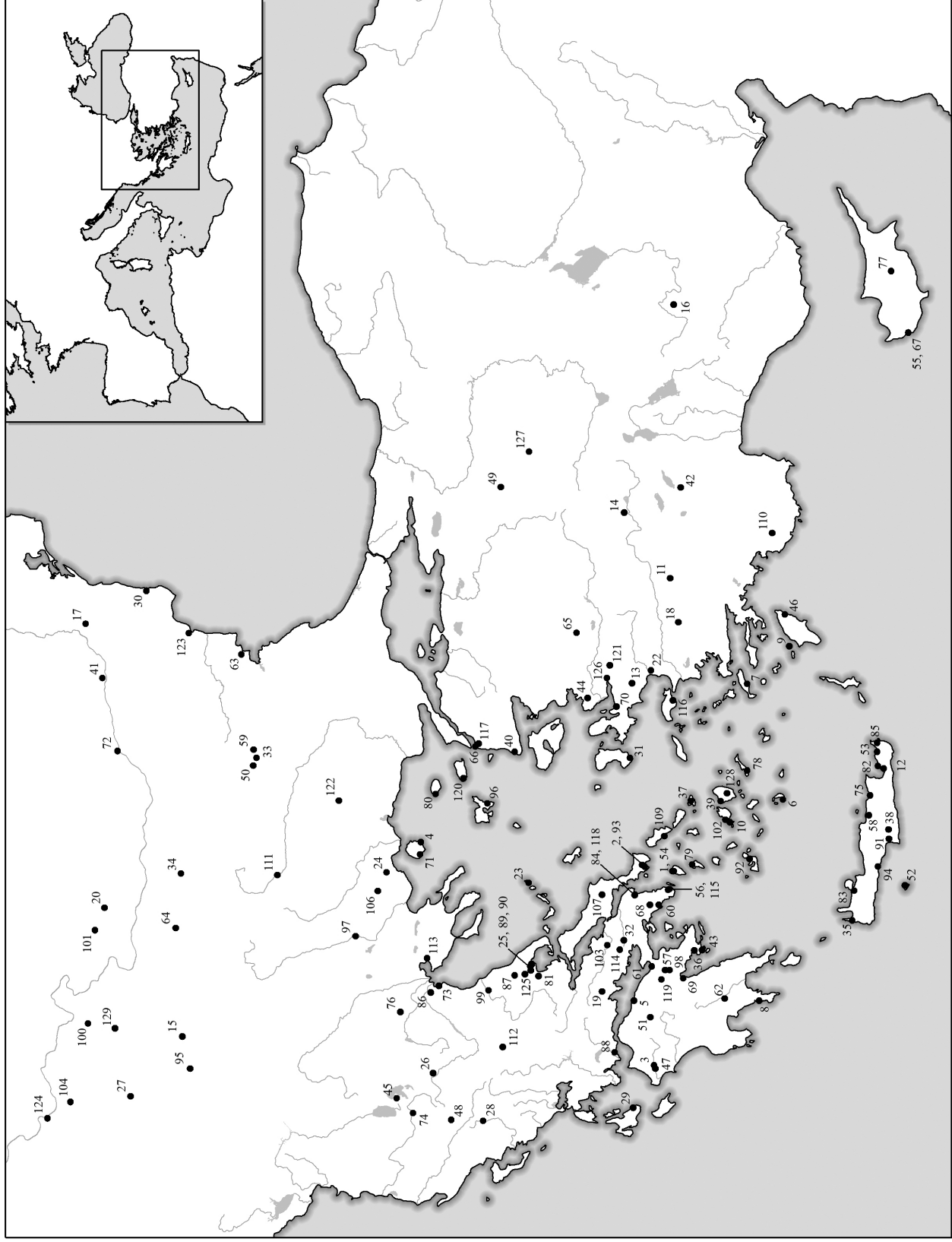
Scientific Committee

Eva Alram, Mycenaean Commission of the Austrian Academy of Sciences
Philip Betancourt, Temple University, Philadelphia
Hayat Erkanal, University of Ankara
Michael Fotiadis, University of Ioannina
Kostas Kotsakis, University of Thessaloniki
Krzysztof Nowicki, Institute of Archaeology of the Polish Academy of Sciences
Mehmet Özdoğan, University of Istanbul
William Parkinson, The Field Museum of Natural History, Chicago
Colin Renfrew, University of Cambridge
Adamantios Sampson, University of the Aegean
Lucia Vagnetti, CNR, Rome
Karen D. Vitelli, Indiana University
Søren Dietz, Fanis Mavridis, Žarko Tankosić and Turan Takaoğlu

List of contributors

Alram-Stern Eva	eva.alram@oeaw.ac.at	Mavridis Fanis	fanismavridis@gmail.com
Aslanis Ioannis	iaslanis@eie.gr	Merkyte Inga	merkyte@hum.ku.dk
Bamyacı Onur	aobamyaci@gmail.com	Metaxas Odysseas	odymetaxas@hotmail.com
Bangsgaard Pernille	pernille.bangsgaard@snm.ku.dk	Milanović Dragan	draganarh@gmail.com
Bintliff John	j.l.bintliff@arch.leidenuniv.nl	Mina Maria	m.mina@ucy.ac.cy
Boyadzhiev Kamen	kamenyb@abv.bg	Mishina Tatyana	tmishina@mail.ru
Boyadziev Yavor	yavordb@abv.bg	Nanoglou Stratos	stratos.nanoglou@gmail.com
Bulatović Aleksandar	abulatovic3@gmail.com	Nazou Margarita	nazoumarg@yahoo.com
Carter Tristan	stringy@univmail.cis.mcmaster.ca	Nedelcheva Petranka	pnedelcheva@nbu.bg
Caymaz Tayfun	tayfuncaymaz@nevsehir.edu.tr	Nowicki Krzysztof	erganos@hotmail.com
Çevik Özlem	arkeocevik@yahoo.com	Oberweiler Cécile	Cecile.Oberweiler@efa.gr
Coleman John E.	jec13@cornell.edu	Özdemir Abdulkadir	akadir23@gmail.com
Danov Veselin	azgard@abv.bg	Palli Ourania	opalli@culture.gr
Darcque Pascal	pascal.darcque@mae.u-paris10.fr	Papadopoulos Stratis	epapadopoulos@culture.gr
Derin Zafer	zaferderin@gmail.com	Pappa Maria	mpappa@culture.gr
Dietz Søren	soren.dietz@gmail.com	Parkinson William A.	wparkinson@fieldmuseum.org
Di Tonto Serena	serenaditonto@yahoo.it	Perlès Catherine	catherine.perles@mae.u-paris10.fr
Erdoğu Burçin	berdogu@gmail.com	†Peltenburg Edgar	diane.bolger@ed.ac.uk
Facorellis Yorgos	yfacorellis@yahoo.com	Popova Margarita	margarita_po@abv.bg
Gatsov Ivan	igatsov@yahoo.com	Pospieszny Łukasz	l.pospieszny@wp.pl
Gauss Walter	walter.gauss@oeai.at	Psathi Eleni	epsathi@culture.gr
Georgiadis Merkouris	merkourisgeorgiadis@hotmail.com	Pullen Daniel	dpullen@fsu.edu
Georgieva Petya	petyageorg@gmail.com	Rambach Jörg	joergrambach@yahoo.gr
Günel Sevinç	sgunel@hacettepe.edu.tr	Reingruber Agathe	agathe.reingruber@fu-berlin.de
Gyucha Attila	gyuchaa@gmail.com	Renfrew Colin	acr10@cam.ac.uk
Horejs Barbara	Barbara.horejs@oeaw.ac.at	Ridge William P.	wridge2@uic.edu
Işın Gül	gulisin@akdeniz.edu.tr	Riebe Danielle	driebe2@uic.edu
Kapuran Aleksandar	a.kapuran@gmail.com	Şahoğlu Vasıf	vasif.sahoglu@ankara.edu.tr
Karali Lilian	likarali@yahoo.com	Sampson Adamantios	adasampson@gmail.com
Katsarou-Tzevekeki Stella	stella@stellakatsarou.gr	Sarri Kalliope	Kalliope.Sarri@gmail.com
Kopaka Katerina	kopaka@phl.uoc.gr	Schwall Christoph	christoph.schwall@oeaw.ac.at
Korkut Taner	tkorkut@akdeniz.edu.tr	Stratouli Georgia	gstratouli@gmail.com
Kotsakis Kostas	kotsakis@hist.auth.gr	Tankosić Žarko	ztankosic@gmail.com
Koukouli-Chryssanthaki Haido	ckoukouli@gmail.com	Takaoglu Turan	turantakaoglu@gmail.com
Kufel Mariusz	mariuszkufel02@gmail.com	Televantou Christina	chtele@otenet.gr
Kyparissi-Apostolika Nina	nkyparissi@hotmail.com	Terzijska-Ignatova Stoika	ignatovatony@gmail.com
Lambropoulos Dimitris	dimitrioslamb@gmail.com	Theou Efthimis	efthimis80@hotmail.com
Lera Petrika	petrika_lera@yahoo.it	Todaro Simona	svtodaro@unict.it
Malamidou Dimitra	dimitra_malamidou@homail.com	Touchais Gilles	touchais.gilles@wanadoo.fr
Mari Aleksandra	marichar70@gmail.com	Treuil René	rtreuil2@gmail.com
Mastrogiannopoulou Vagia	vagia.mastro@gmail.com	Tsirtsoni Zoi	zoi.tsirtsoni@mae.u-paris10.fr
Matsanova Velichka	mazanova@abv.bg	Tuncel Rıza	rtuncel@gmail.com
		Turkcan Ali Umut	aturkcan@anadolu.edu.tr
		Vakirtzi Sophia	sophiavakirtzi@hotmail.com
		Voskos Ioannis	ivoskos@hotmail.com

List of sites



map author: Dr. Rebecca Seifried

<i>Number</i>	<i>Site name</i>	<i>Number</i>	<i>Site name</i>	<i>Number</i>	<i>Site name</i>	<i>Number</i>	<i>Site name</i>
1	Ayia Irini	35	Falasarna	68	Leontari (Lion's Cave)	100	Rudna Glava
2	Ayia Triada	36	Franchthi Cave			101	Sălcuța
3	Ayios Demetrios	37	Ftelia	69	Lerna	102	Saliagos
4	Ayios Ioannis	38	Gortyn	70	Liman Tepe (Klazomenai)	103	Sarakenos Cave
5	Aigeira	39	Grotta			104	Selevac
6	Akrotiri	40	Gülpınar (Smintheion)	71	Limenaria	105	Sesklo
7	Alasarna			72	Mägura	106	Sitagroi
8	Alepotrypa Cave	41	Gumelnița		Gorgana	107	Skoteini Cave
		42	Hacılar	73	Makriyalos	108	Sredny Stog
9	Alimia	43	Halieis	74	Maliq	109	Strofilas
10	Antiparos Cave	44	Ilıpınar	75	Mallia	110	Tavabaşı Cave
11	Aphrodisias	45	Kallamas	76	Mandalo	111	Tell Yunatsite
12	Azoria	46	Kalythies Cave	77	Marki	112	Theopetra Cave
13	Bakla Tepe	47	Kalyvia	78	Markiani	113	Thermi
14	Beycesultan	48	Kamnık	79	Maroulas	114	Thespies
15	Bubanj Hum	49	Kanlıtaş Höyük	80	Mikro Vouni	115	Thorikos
16	Çatalhöyük	50	Karanovo	81	Mikrothives	116	Tigani
17	Cernavoda	51	Kastria	82	Mochlos	117	Troy
18	Çine-Tepecik	52	Kavos	83	Nerokourou	118	Tsepi
19	Corycian Cave	53	Kephala Petras	84	Oinoe IV	119	Tsougiza
20	Coțofeni	54	Kephala	85	Palaikastro	120	Uğurlu
21	Cucuteni	55	Kissonerga	86	Paliambela	121	Ulucak
22	Çukuriçi Höyük	56	Kitsos Cave		Kolindrou	122	Varhari
23	Cyclops Cave	57	Klenia Cave	87	Palioskala	123	Varna
24	Dikili Tash	58	Knossos	88	Pangali	124	Vinča
25	Dimini	59	Kodzhadermen	89	Pefkakia	125	Visviki
26	Dispilio	60	Kontra Gliate (Kiapha Thiti)	90	Petromagoula		Magoula
27	Divostin			91	Phaistos	126	Yeşilova Höyük
28	Doliana	61	Korakou	92	Phylakopi	127	Yeşiltepe
29	Drakaina Cave	62	Kouphovouno	93	Plakari	128	Zas Cave
30	Durankulak	63	Kozareva	94	Plakias	129	Zlotska Pečina
31	Emporio		Mogila	95	Pločnik		
32	Eutresis	64	Krivodol	96	Poliochni		
33	Ezero	65	Kulaksızlar	97	Promachon		
34	Ezero-Kale, Telish-Liğa	66	Kumtepe	98	Prosymna		
		67	Lemba	99	Rachmani		

Tracing social changes in the Late Neolithic/Final Neolithic transition at Drakaina Cave, Kephallonia, Western Greece

Georgia Stratouli and Odysseas Metaxas

The cave and its stratigraphy

Drakaina Cave is located close to the south-east coast of Kephallonia Island, within the area of the village of Poros (Fig. 30.1), on the steep cliffs of the Vochynas Gorge at an

altitude of *ca.* 70 m (Fig. 30.2). In its present form, Drakaina is an open shallow cavity with a sheltered area measuring *ca.* 90 m² (Fig. 30.3). Excavations at Drakaina Cave were carried out between 1992–96, 1999–2002 and 2004–5 by the



Figure 30.1. Satellite image of the area of Kephallonia and view of the Poros village with the Vochynas gorge and the location of Drakaina Cave on its cliffs (photo taken from the east).



Figure 30.2. View of the Vochynas gorge with the location of Drakaina Cave (photo taken from the west).

Ephorate of Palaeoanthropology-Speleology and extended over an area of *ca.* 48 sq m.¹

The uppermost part of the Drakaina Cave sequence comprises archaeological layers (*ca.* 0.20–0.40 m thick) that date from the late 7th to the early 2nd century BC (Fig. 30.4), when the site was a cult cave dedicated to the Nymphs. Underlying these layers, there was an accumulation of natural deposits (*ca.* 0.10–0.15 m in thickness) devoid of cultural remains. Immediately below there was a unit of mixed Early Bronze Age (EH I–II) and Final Neolithic (FN) finds. The Late Neolithic (LN)/Final Neolithic cultural layers at Drakaina constituted the bulk of the archaeological sequence (Fig. 30.4). They consist of prehistoric stratified deposits representing a long and complex sequence, dated to two main phases: a transitional Middle Neolithic/Late Neolithic and Late Neolithic I phase (*ca.* 5600–4900/4800 cal BC) and a Late Neolithic II phase (*ca.* 4900/4800–3700 cal BC), including a large part of the Final Neolithic (*ca.* 4500–3700 cal BC). These two phases

will be termed Drakaina I and Drakaina II, respectively, in this paper.

The archaeological material from the cave's Neolithic deposits

Within the Neolithic sequence of layers, several hard, whitish-coloured units were uncovered, dated mostly to Drakaina II. Through micromorphological analysis they were identified as lime-plastered floors.² These surfaces, which were constructed at intervals, show a remarkable consistency in material and technique over a time span of almost a millennium. Furthermore, the occupational deposits of the cave display *in situ* preserved remains of hearths, as well as material from several raked-out fire installations mixed with burnt food remains.

Additionally, the Neolithic deposits of the cave contained a plethora of pottery: this includes a variety of wares, such as black burnished, Urfirnis, and dark-on-light, along with

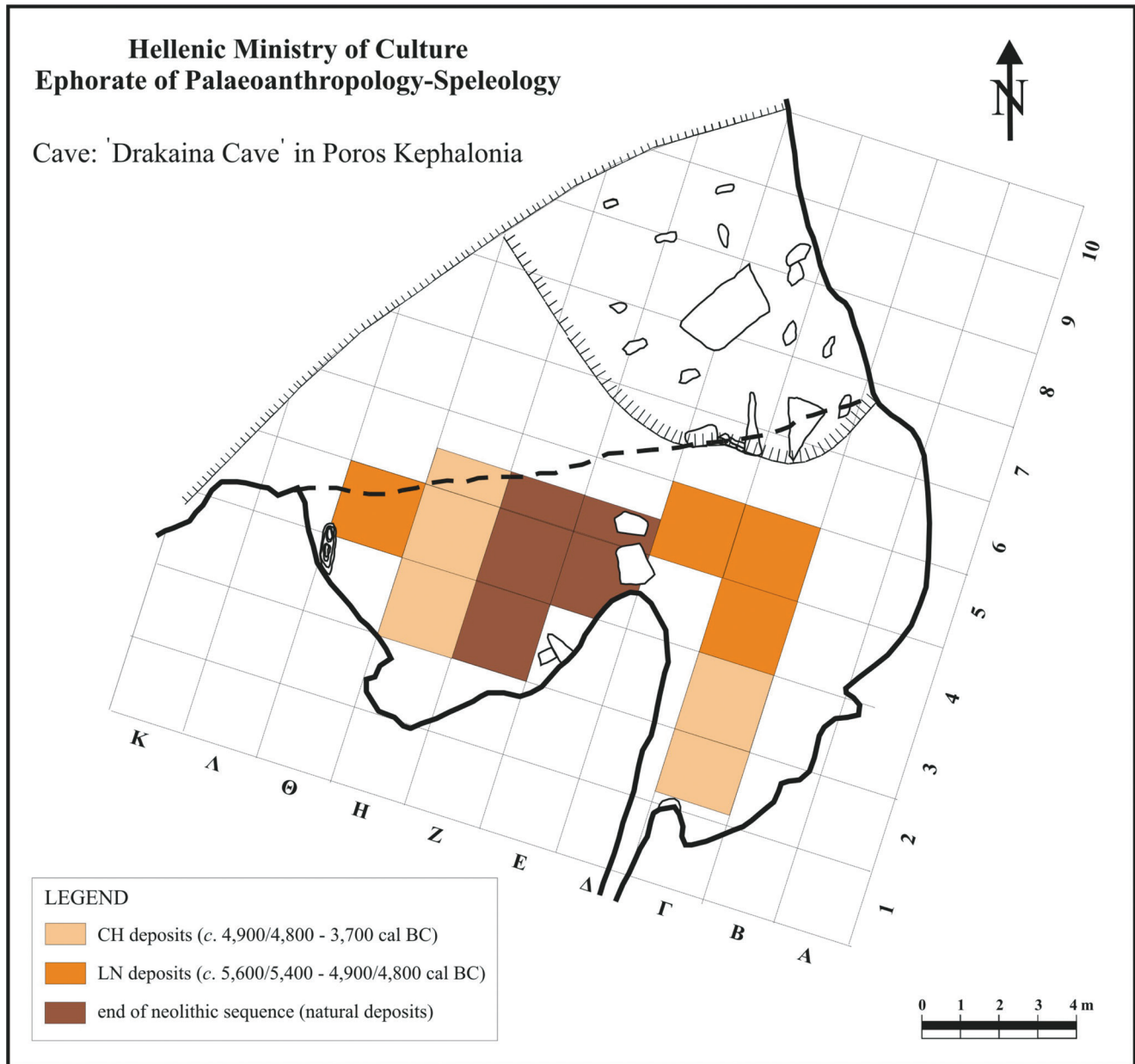


Figure 30.3. Plan of Drakaina Cave (after the topographer Theodoros G. Chatzitheodorou) with the excavation grid and the neolithic deposits revealed to date in each trench.

zoomorphic four-legged rhyta, all characteristic of the Drakaina I occupation phase. Pithoid vessels with plastic decoration as well as polychrome and crusted wares are characteristic of the Drakaina II phase.

Other categories of material were represented in abundance as well, such as ca. 550 chipped stone formal tools and more than 10,500 knapping by-products. A large assemblage of ca. 440 ground stone implements was used for various tasks, like food preparation, pigment processing and chert knapping.

Imported artefacts (or their raw materials) include: gabbro and dolerite celts, most probably from the Grevena

area of the Pindos Mountains (Greek Mainland); a large number of talc beads, possibly from the Pindos Mountains as well; a fragment of a zoomorphic vessel made of marble originating from the island of Naxos in the Cyclades; a small number of obsidian artefacts from the island of Melos, also in the Cyclades; and two gypsum beads from the neighbouring island of Zakynthos. A few of the analysed pottery samples are most likely imported as well. In contrast, all chert artefacts subjected to petrographic and Rare Earth Element (REE) analyses seem to be from local sources near the Poros area.³



Figure 30.4. View of the western part of Drakaina Cave with the stratigraphic sequence from the natural bedrock to modern times, projected on the west profile of trenches H3 to H5 and on the south profile of trench E4. The red dotted lines indicate the approximate level of preserved lime plaster floors occurring within the Neolithic sequence.

A considerable part of the archaeological material was almost certainly used during gatherings, periodically hosted in the Drakaina Cave. It is notable that cereals and legumes reached the cave already processed and ready for consumption,⁴ while the bones of domesticates are dominated by selected body parts providing high nutritional yield.⁵ We will argue that these gatherings were related to the negotiation and reproduction of local social norms. Despite elements of continuity between chrono-cultural phases, we will focus here on some indications of change between the two main Neolithic phases of the Drakaina Cave that can furnish some evidence for the variable nature of those gatherings during the course of the Neolithic period.

The centrality and interconnection of projectile points and red pigment

A salient characteristic of the chipped stone assemblage is the large number of projectile points (Fig. 30.5); their number reached at least 213 specimens, after the totality of the chipped stone material was analysed. It is often asserted that projectile points can be imbued with symbolic value.⁶ A variety of indications points to the assumption that projectiles held a symbolic role in the gatherings that took place at Drakaina Cave and had a wider significance within the local socio-cultural context.

The LN I assemblage consists of asymmetrical points and transverse arrowheads. The majority of asymmetrical points are shouldered. The term “asymmetrical” was preferred since longitudinal axis asymmetry is the sole common denominator in this morphological category. Transverse arrowheads are fewer and disappear after early LN I. It is notable that the distinction between asymmetrical points and transverse arrowheads is arbitrary, since they form a morphological continuum. Drakaina II projectiles include tanged and asymmetrical points, as well as two triangular points.

At other sites across the Aegean tanged points are generally used after the MN/LN transition. It might be argued that the proliferation of obsidian in Southern Greece after the start of LN is related to the spread of tanged points, which usually exhibit more extensive bifacial flaking. Since Kephallonia remained effectively on the margin of the obsidian trade area, a rather wasteful utilisation of local raw materials might account for the persistence of a given lithic morpho-technological category. Technological “style” would have a passive character, as a case of “isochrestic variation.”⁷ However, the introduction of tanged points at Drakaina II is not accompanied by any general raw material procurement or technological change in the chipped stone industry. For this reason, another explanation has to be formulated for both the persistence of asymmetrical points during LN I–II and the absence of tanged points from LN I layers.



Figure 30.5. Various groups/types of chert projectile points from the LN and CH (including FN) layers of Drakaina Cave.

The Drakaina Cave chipped stone debitage is characterised by the overwhelming preponderance of a simple, occasionally bipolar flake reduction sequence. A blade reduction technology was only marginally practiced at the site, since blade(let) cores and crested blades are very rare. That is unlike the chipped stone assemblage from Choirospilia on the neighbouring island of Lefkas, which includes ample evidence of *in situ* blade production.⁸ At the early FN site of Pangali in Aetolia, across the sea on the mainland, a variety of reduction techniques is attested.⁹ The above observations suggest that knapping was a circumscribed activity at Drakaina Cave, aiming at the fulfilling of a specific spectrum of tasks.

A remarkable feature of the Drakaina Cave lithics is the selective usage of reddish chert. The symbolic connotations of the colour red have been extensively discussed in the archaeological literature.¹⁰ In the case of Drakaina lithics, reddish chert was almost exclusively reserved for projectile tips (13.6% vs. 1.3% for other tool types). Its flaking quality is unrelated to this pattern, since a variety of “honey”

coloured chert, which is generally of very fine quality, was regularly utilised for the manufacture of other tool types. It seems therefore that functional considerations cannot account for the fact that reddish chert was avoided for artefacts other than projectiles.¹¹

It has been stated that colour can act as a binding element, symbolically bridging different parts of the material world.¹² In this line of reasoning, the assumption that the colour red had a metonymic role related with some facet of local ideology is further supported by the abundance of ground stone tools used for the processing of red pigment (n=56). Furthermore, sherds of burnished ceramic vessels also bear residual stains of red pigment.

The possibility of some kind of rites involved in the construction of a “male” ideology and identity, mediated through the “engendering” of red colour symbolism, seems attractive. The utilisation of reddish chert would be limited to projectile points perhaps in order to solidify the values with which the colour red was symbolically connected, such as hunting, warfare or masculinity in general.

The interrelatedness of “technological” and “social” in Drakaina Cave use

Essentially, the morpho-technologically conservative character of the projectile tip assemblage, their apparent symbolic connotations and their manufacture and use in the context of special circumstances at Drakaina Cave seem interrelated. It can be suggested that LN I projectiles were discarded following a formalised and repetitive sequence of events. Such events possibly included the use of red pigment, perhaps for the adornment of the bodies of the participants and/or for smearing burnished ceramic vessels, as well as knapping aiming primarily at the manufacture of projectile points. The strong tendency of spatial concentration of projectile points towards the external part of the cave during LN I is remarkable in this respect, being indicative of separate activity zones within the cave.

The idea that technologies and modes of social organisation are inseparably bounded has gained ground recently.¹³ It can be reasonably stated that they can be mutually constituted and transformed.¹⁴ However, elements of material culture can be a fundamental part of the “habitus” or identity of a given group to such a degree that their manufacture can in some cases resist profound social changes.¹⁵ Furthermore, it has been noted that forms of social control are frequently associated with the transmission of technical skills/knowledge, in a repetitive or ritualised form.¹⁶ The persistence of asymmetrical points throughout the LN and the construction of lime-plastered floors for an even longer time span suggest a consistent system of vertical transmission. Such a system seems directly related to the negotiation of local identity and communal memory, through social gatherings and ritual at Drakaina Cave.¹⁷

The social and/or symbolic importance of weaponry manufacture at Drakaina Cave is perhaps highlighted by a possible fragmentary clay model of an arrow shaft straightener. It is hard to envisage how a clay artefact could have been usable for an activity involving intense friction that would rapidly destroy the U-shaped groove. Moreover, striations or other signs of use are absent.

Drakaina Cave as part of a social landscape

Drakaina Cave was a focal point regarding the negotiation and perpetuation of a “local” ideology, through festive events, as a part of a landscape with multi-faceted power.¹⁸ The gorge is the only passage from the south-eastern coast to the interior of the island, which is sealed by a coastal row of hills and mountains. Being a prominent landscape feature, visible from afar, it featured until recently in tales involving deities and other supernatural entities. It was in all likelihood pivotal in local cosmological and mythological tradition during the Neolithic as well, being a prominent “ancestral” landscape feature.¹⁹ The cave itself is secluded

and hardly accessible. Difficult access and remote location are characteristics of sites with some sort of special use in many ethnographically well-documented societies.

In any case, there are obstacles in positioning the cave’s use with its abundance of projectiles in a merely economically oriented framework of subsistence strategies. The percentage of wild fauna in the archaeozoological material is rather low and comparable with that of Neolithic sites in the Aegean area.²⁰ Moreover, the location of the cave among nearly vertical cliffs would limit the use of the site for routine hunting purposes. Other localities around the gorge are far more suitable in practical terms, without the disadvantage of moving on very steep terrain. The importance of hunting in regard to the cave’s use might lie in constructing an engendered identity, as well as in creating a specific social perception of the landscape.²¹ We should not postulate that any hunting activities were disconnected from subsistence, though, since in traditional societies domestic/subsistence and ritual aspects are often inseparable.²²

The use of caves for the negotiation of “male” identity through initiation rites has been argued for a number of sites in South-Eastern Italy.²³ Even though we will argue that the impetus for the performance of non-domestic activities at Drakaina is more probably intrinsic to the group(s) using the cave, it is possible that certain features of the cave’s use, or even the selection of a cave site for such activities, are the outcome of contacts with the wider Ionian-Adriatic area. It has to be noted that the four-legged “Danilo” scoops can be interpreted as a sign of shared ritual practices from the Northern Adriatic region to Southern Greece.

The Drakaina Cave symbolic aspects in context

It is noteworthy that large assemblages of projectile tips are characteristic of many Cycladic LN and FN sites. That can be related to economic factors, warfare or aspects of power negotiation.²⁴ These features might have been to some extent correlated with insularity.²⁵ It is thus important to evaluate the possible role of an insular environment in projectile points’ increased use and, as the Drakaina Cave data suggest, symbolic value.

During the Neolithic, exchange networks and mutual relations with other groups were crucial for sites’ long-term viability, as well as for the viability of specific households.²⁶ Contacts with the mainland, however, involved considerable *ad hoc* seafaring, rather than being embedded in a more flexible network of down-the-line exchange. That does not necessarily entail that interregional contacts were harder to maintain, but rather that they had a different socio-economic basis. A smaller fraction of individuals or households would be directly involved, providing opportunity for aggrandising behaviour and elevated attained status.²⁷ In addition, group fission, which might compensate for resource shortages or intra-group tension, appears as a less enticing option in

the case of an island lying at distance from the mainland. Pressure exerted on a system of social organisation with egalitarian or horizontal hierarchical principles could be conducive to competition and increased episodes of conflict, especially during “bad years”.

Such pressure was alleviated by the moulding of an identity based on local tradition and incorporating a symbolic relationship with the past and the ancestors. The operation of socially cohesive mechanisms has been claimed within the framework of the Greek Neolithic,²⁸ albeit with differing characteristics. The identity negotiated at Drakaina Cave had a distinct “male” orientation, putting symbolic emphasis on weapons, since that was crucial in bolstering group cohesion in instances of crisis and inter-group competition. It was partly expressed with the construction of a material culture boundary with the mainland, selectively involving projectile tips. Such a situation finds parallels in ethno-archaeological accounts, in which certain material culture elements are employed for the construction and maintenance of a social boundary.²⁹

The creation of a material culture boundary setting Kefalonia apart from the mainland involved local intra- and inter-group processes³⁰ rather than being directly connected to mainland groups. Demarcated local identity and symbolic reference to the past, functioning as defining factors of local power negotiation and social structuring, could also aim at curtailing the influence of interregional networks.

At any rate, we should not view the existence of such a local ideology as antagonistic towards interlocal relations, but rather as complementary. The forging of a corporate identity based on local tradition could facilitate the incorporation of exchange networks within the local social context, mitigating any adverse effects.

Pottery and ornaments in the context of social gatherings

Pottery fragmentation provides some further evidence regarding the nature of the gatherings in Drakaina Cave. In the case of Drakaina I, Urfinis and matte-painted pottery, as well as four-legged scoops, exhibit a distinctively high degree of fragmentation. Many different vessels are represented only by one sherd and rarely by more, while in almost all cases just a small part of any given vessel is preserved. Burnished and coarse pottery vessels, on the other hand, are more frequently represented by more numerous, joining sherds. It seems that some kind of selection was affecting the fragmentation pattern among separate pottery varieties, which tended to have differing biographies.

Urfinis and matte-painted pottery was prone to be part of intercommunal exchanges. Moreover, such pottery was used and consumed during activities of special, non-domestic character.³¹ Neither Urfinis nor matte-painted ware sherds from Drakaina Cave ever exhibit repair holes, in marked

contrast with black burnished and coarse ware fragments. This fact, combined with their pronounced degree of fragmentation, suggests that Urfinis and matte-painted pots may have been consumed during the gatherings taking place in Drakaina Cave, their life span being commensurate with the non-domestic circumstances of their use at the site. The circulation of sherds after their consumption might have been part of the articulation of the aforementioned corporate identity, creating enchainment relations.³²

The *Spondylus gaederopus* bracelets found in Drakaina Cave have to be considered as well. Eight fragments, dated to early LN I, belong to between four and six bracelets. Such ornaments could be locally made. Nevertheless, during the second half of the 6th millennium BC *Spondylus gaederopus* bracelets were part of an extended exchange network, reaching large parts of the LBK territory over Central Europe. This may have added to the value of the Drakaina Cave specimens, which were fragmented, burned and discarded as part of a single event, since all fragments were found in the same layer and trench. It is not possible, however, to evaluate more precisely their significance in relation to interregional connections or an engendered symbolic code negotiated in Drakaina Cave. In the contemporary LBK area *Spondylus gaederopus* bracelets were associated with male graves,³³ but it is unclear if such a gender-specific association existed in the Aegean area.

Evidence for social change at the transition to Drakaina II

The transition to the Drakaina II phase is witness to multiple changes. Several material culture elements appear contemporaneously, including tanged points, pithoid vessels with plastic decoration and polychrome wares. At the same time, there is a significant intensification in the construction of lime plaster floors.

There are reasons to believe that the local, socially integrative identity mentioned earlier, exhibits signs of disintegration or at least some kind of change during the LN II period. Despite the continuing manufacture of asymmetrical points, the appearance of tanged points signals the blurring of the material culture boundary with the mainland.

Moreover, a group of very skilfully made, large tanged and barbed points (Fig. 30.5) differ from the rest in every stage of the operational sequence in their production. Only reddish or “honey”-coloured chert was utilised, unlike the rest of the projectiles, for which any kind of raw material was used independently of the degree of technical expertise. Prismatic blades were used as blanks, while manufacture should have involved at least one intermediate preform. As the outcome of a distinctly standardised production, specimens of this group exhibit a very similar size and length/width ratio. Such projectiles were seemingly endowed

with a different symbolic capital, perhaps being involved in novel processes of power negotiation entailing little or no overlap with the traditional role of projectiles during LN I.

It is notable that the standardised projectiles from Drakaina Cave are very similar to a point from Kitsos Cave in Attica, made of “chocolate” coloured flint, which dates to LN II.³⁴ It seems that from the later stages of LN onwards such points were part of an exchange network originating in areas outside the obsidian trade sphere. In addition, the similarities in size, length/width ratio and overall morphology indicate that such points were elements of a well-defined symbolic code grounded in warfare/hunting and interregional connectivity/gift exchange.

At the beginning of the FN the trends of LN II were consolidated by a much more extensive exchange network. This is manifested by the circulation of *large triangular points*, perhaps more suitable for display, throughout Greece and the Balkans.³⁵ Two triangular points have been found at Drakaina Cave, one of which is probably unfinished. It is important that both triangular and standardised tanged and barbed points are generally made of siliceous raw materials, which shows that, at least at the areas where obsidian was dominant, such exchange was driven by the desire for exotic objects and the material manifestation of distant contacts. That may well be relevant to the social context of the changes characterising the Drakaina II phase.

A further notable feature of the Drakaina II phase is the change in spatial distribution of projectile tips. These are no longer clustered but rather more sparsely yet evenly encountered, a fact underlined by the distribution of tanged points. This might entail that projectile points ceased to be deposited as part of a formalised procedure, centred on a particular activity area.

Regarding pottery, polychrome and crusted wares no longer display the conspicuously high fragmentation of earlier Urfinis or matte-painted pottery. Even though many vessels are still represented by only one sherd, a number consist of several joining pieces.

To sum up, in the Drakaina II phase there is a dichotomy between two distinct groups of projectile tips on the basis of raw material utilisation, technology and degree of skill and know-how. This feature, in comparison with the situation during the LN I period, points towards the emergence of some kind of social segmentation and inequality. This would be congruent with a pattern postulated for the later stages of the Greek Neolithic.³⁶ Decorated pottery fragmentation also shows a differential treatment of painted ware vessels, shifting away from the uniformity of the preceding period. Moreover, projectile tips do not exhibit a clustered spatial distribution, as they did in LN I. The two latter features suggest that particularly structured aspects of the cave’s use faded after the end of the Drakaina I phase.

The preceding discussion favours a relationship between incipient social differentiation and a reorientation of the ties of local groups with the mainland. It is more challenging to evaluate whether changing elements of symbolic expression in Drakaina Cave fit into the same picture. The Drakaina II phase is characterised by an upsurge in the construction of lime plaster floors, which were more extended, thicker and constructed at shorter intervals.

The construction of lime plaster floors was a multi-staged task, partly carried out outside the cave, while at least the production of lime plaster required some level of specialised know-how. It is notable that lime plaster already had a long history of use in ritual contexts in the Near East and Anatolia.³⁷ In the case of Drakaina Cave, several properties, such as the plaster’s whiteness and its more complex procedure of production in comparison to other plasters, very likely contributed to the ascription of symbolic significance. Such a procedure, with a visually evocative result, might have been used by certain groups in order to emphasise certain ritual aspects of such gatherings. Thus, the construction or renewal of lime plaster floors could have been carried out in conjunction with ceremonial events. Whatever the actual circumstances, the intensification of lime plaster floor construction is an important feature, concomitant with other changes in the material culture record.

Concluding remarks

As an epilogue, we can say that the LN I period exhibits certain peculiarities in Drakaina Cave. They stem, we believe, from an idiosyncratic trajectory of dealing with local social tensions, on which aspects of insularity very likely had a bearing. This involved heterarchy and interplay between network-oriented relationships and a communal identity rooted in local tradition. Any differences of this island society from Mainland Greece, however, should not force us to disassociate the use of Drakaina Cave from the upsurge in the use of caves in Southern Greece during the LN/FN periods. Evidence for growing regionalism exists after the end of the MN period.³⁸ Non-domestic aspects of cave use can be related to changing perceptions of territoriality or group identity.

The Drakaina II phase appears to be more in line with developments in the wider Aegean area. There are indications that social segregation started to become reflected in the material record. Developments in the adjacent areas of the Greek Mainland seemingly exerted an increasing influence on local communities, rendering the effectiveness of levelling mechanisms promoting social cohesion redundant. Repetitive, symbolically charged practices certainly continued to be carried out in Drakaina Cave. They might differ in many respects, though, from

those of earlier times, and some elements, such as red colour symbolism, seem to be reinterpreted.

The LN/FN transition in Drakaina Cave is meaningful as a gradual process. The LN II phase in Drakaina Cave shows some evidence of continuity from LN I, such as the use of asymmetrical points or black burnished pottery. It is, however, more closely related to the FN period, since important novel characteristics are documented in early LN II that continue into FN.

As a consequence, we believe that we can get some insight into the long-term social dynamics of an area that is sparsely studied, and evaluate to some extent its position within the Greek Neolithic, at least for the time frame covering the LN and the early stages of FN. Future research on settlement data is of course necessary to further address many issues that have been touched upon in this paper.

Notes

- 1 Chatzioti 2007; Stratouli 2005; Stratouli 2007.
- 2 Karkanas and Stratouli 2008.
- 3 See V. Melfos's contribution in Stratouli *et al.* 2014, 30–1.
- 4 See A. Sarpaki's contribution in Stratouli *et al.* 2014, 26.
- 5 See E. Kotzabopoulou's contribution in Stratouli *et al.* 2014, 27.
- 6 *e.g.* Sarauw 2007; Taçon 1991; Warburton and Duke 1995; Wilkins 2010; for the Greek Neolithic see Perlès 1992, 143; Perlès 2004, 148–9.
- 7 Sackett 1985.
- 8 Kourtessi-Philippakis 2006b, 169–70.
- 9 Sørensen 2006.
- 10 *e.g.* Borić 2002; Erdoğu and Ulubey 2011; Scarre 2004; Stafford *et al.* 2003.
- 11 *cf.* N.H. Andreasen's contribution in Stratouli *et al.* 2014, 29–30.
- 12 Young 2006, 180.
- 13 *e.g.* Dobres 2010; Dobres and Hoffman 1994; Lemonnier 1992; van Gijn 2010.
- 14 *e.g.* Boivin 2004.
- 15 González-Ruibal *et al.* 2011.
- 16 Apel 2001; Stout 2002, 701–3.
- 17 See Connerton 1989; Jones 2003; Peterson 2013.
- 18 For the Greek Neolithic see Tomkins 2009, 137–8; Tomkins 2012, 67–9.
- 19 Ashmore 2004; Bradley 1998b; Tilley 1994.
- 20 *cf.* E. Kotzabopoulou's contribution in Stratouli *et al.* 2014, 27.
- 21 See Hamilakis 2003.
- 22 Bradley 2005.
- 23 Whitehouse 1992; Whitehouse 2002.
- 24 Carter 2008a, 227–8.
- 25 For the importance of insularity in distinct cultural trajectories see Knapp 2007.
- 26 See Perlès 2001, 297; Souvatzi 2013, 59.
- 27 For the significance of distance in such networks see Helms 1988.
- 28 Halstead 2004; Kotsakis 1999; Souvatzi 2008, 216–30.
- 29 Akkermans 1993, 318–21; Dietler and Herbich 1998; Gosselain 2000; Hodder 1982; Welsh and Terrell 1998.
- 30 See Hodder 1982; Larick 1986.
- 31 Perlès and Vitelli 1999.
- 32 See Chapman 2000a.
- 33 John 2011, 41.
- 34 Perlès 1981, pl. VIII, 19.
- 35 Carter and Ydo 1996, 164–5; Demoule and Perlès 1993, 394.
- 36 Halstead 1999; Hamilakis 2003, 242–3; Tomkins 2004.
- 37 Clarke 2012.
- 38 Perlès and Vitelli 1999.