



McDONALD INSTITUTE MONOGRAPHS



The Marble Finds from Kavos and the Archaeology of Ritual

Edited by Colin Renfrew, Olga Philaniotou, Neil
Brodie, Giorgos Gavalas & Michael J. Boyd

**The sanctuary on Keros and the origins
of Aegean ritual practice VOLUME III**

ΙΣΝ/SNF

ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ
STAVROS NIARCHOS
FOUNDATION



INSTAP

The Marble Finds from Kavos and
the Archaeology of Ritual





McDONALD INSTITUTE MONOGRAPHS

The Marble Finds from Kavos and the Archaeology of Ritual

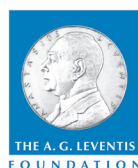
Edited by Colin Renfrew, Olga Philaniotou, Neil Brodie,
Giorgos Gavalas & Michael J. Boyd

with contributions from

Myrto Georgakopoulou, Anno Hein, Jill Hilditch, Vassilis Kilikoglou,
Daphne Lalayiannis, Yannis Maniatis, Peggy Sotirakopoulou
& Dimitris Tambakopoulos

The sanctuary on Keros and the origins of Aegean ritual
practice: the excavations of 2006–2008
VOLUME III

ΙΣΝ / SNF
ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ
STAVROS NIARCHOS
FOUNDATION



INSTAP

Published by:

McDonald Institute for Archaeological Research
University of Cambridge
Downing Street
Cambridge, UK
CB2 3ER
(0)(1223) 339327
info@mcdonald.cam.ac.uk
www.mcdonald.cam.ac.uk

Distributed by Oxbow Books

United Kingdom: Oxbow Books, 10 Hythe Bridge Street, Oxford, OX1 2EW, UK.
Tel: (0)(1865) 241249; Fax: (0)(1865) 794449; www.oxbowbooks.com
USA: Casemate Academic, 1950 Lawrence Rd, Havertown, PA 19083, USA.
Tel: 610 853 9131; Fax: 610 853 9146



McDonald Institute for Archaeological Research, 2018

© 2018 by the McDonald Institute for Archaeological Research
The Marble Finds from Kavos and the Archaeology of Ritual is made available under a
Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 (International) Licence:
<https://creativecommons.org/licenses/by-nc-nd/4.0/>

978-1-902937-86-1

Cover image: *The Special Deposit South from the southeast (foreground) with Dhaskalio in the background. Inset: (front) Head 351, from Trench D2, layer 1; (back) Torso 25055 from Trench RA, layer 14.*

Frontispiece image: *Torso, waist, pelvis and upper legs of folded-arm figurine of Spedos variety (30028 from Area P on Kavos).*

Edited for the Institute by James Barrett (*Series Editor*) and Anne Chippindale.

Undertaken with the assistance of the Institute for Aegean Prehistory.

Contents

Contributors	vii
Figures and Plates	viii
Tables	xvi
Abbreviations	xx
<i>Preface</i>	xxi
COLIN RENFREW & MICHAEL J. BOYD	
<i>Acknowledgements</i>	xxii
Part A	The Marble Finds from the Special Deposit South
Chapter 1	The Sculptures from the Special Deposit South: Introduction
	COLIN RENFREW
	1
Chapter 2	The Sculptures from the Special Deposit South: The Finds
	COLIN RENFREW
	19
Chapter 3	Catalogue of Sculptures from the Special Deposit South
	COLIN RENFREW & MICHAEL J. BOYD
	43
	Appendix: Concordance of Special Find, Naxos Museum and Figure Numbers
	DAPHNE LALAYIANNIS & MICHAEL J. BOYD
	255
Chapter 4	The Stone Vessels
	GIORGOS GAVALAS
	259
	Appendix: Quantitative Analyses of the Marble Bowl Fragments
	NEIL BRODIE
	342
Chapter 5	The Provenance of the Marble Artefacts
	DIMITRIS TAMBAKOPOULOS & YANNIS MANIATIS
	355
Part B	Dhaskalio and Kavos in Perspective
Chapter 6	The Pottery from Dhaskalio, the Special Deposit South and the Special Deposit North Compared
	PEGGY SOTIRAKOPOULOU
	433
Chapter 7	The Fabric Study of the Pottery of Dhaskalio and Kavos
	JILL HILDITCH
	445
	Appendix: Neutron Activation Analysis of Early Cycladic Ceramics from Kavos and Dhaskalio
	ANNO HEIN & VASSILIS KILIKOGLU
	494
Chapter 8	Metal production, working and consumption across the sites at Dhaskalio and Kavos
	MYRTO GEORGAKOPOULOU
	501
Chapter 9	The Material Worlds of Dhaskalio and Kavos
	MICHAEL J. BOYD & COLIN RENFREW
	533
Chapter 10	The Conclusion of the 2006–2008 Project
	COLIN RENFREW
	547
<i>Greek summary</i>	559
<i>References</i>	567
<i>Index</i>	577
<i>Colour plates</i>	583

DIGITAL SUPPLEMENTARY MATERIAL

Figures of Volume III (in colour)

Plates of Volume III (in high resolution)

Supplementary images of the artefacts (Chapters 3 & 4)

Chapter 3 Catalogue of Sculptures from the Special Deposit South
 Tables of Special Find, Naxos Museum and Figure Numbers

Chapter 4 The Stone Vessels
 Data tables
 GIORGOS GAVALAS
 Appendix: data tables
 NEIL BRODIE

CONTRIBUTORS

MICHAEL J. BOYD

McDonald Institute for Archaeological Research,
Downing Street, Cambridge, CB2 3ER, UK
Email: mjb235@cam.ac.uk

NEIL BRODIE

School of Archaeology, 2 South Parks Road,
Oxford OX1 3TG, UK
Email: njb1012redux@gmail.com

GIORGOS GAVALAS

Ephorate of Antiquities for the Cyclades,
Epameinonda 10, 10555 Athens, Greece
Email: georgios.gavalas@gmail.com

MYRTO GEORGAKOPOULOU

UCL Qatar, PO Box 25256, Georgetown Building,
Education City, Doha, Qatar
Email: m.georgakopoulou@ucl.ac.uk

ANNO HEIN

Institute of Nanoscience and Nanotechnology,
N.C.S.R. 'Demokritos', 153 10 Aghia Paraskevi,
Greece
Email: a.hein@inn.demokritos.gr

JILL HILDITCH

ACASA Universiteit van Amsterdam,
Turfdraagsterpad 9, 1012XT Amsterdam,
Netherlands
Email: jill.hilditch@uva.nl

VASSILIS KILIKOGLOU

Institute of Nanoscience and Nanotechnology,
N.C.S.R. 'Demokritos', 153 10 Aghia Paraskevi,
Greece
Email: v.kilikoglou@inn.demokritos.gr

DAPHNE LALAYANNIS

Museum of Naxos
Chora, 84300 Kyklades, Greece
Email: daphne.lal@hotmail.com

YANNIS MANIATIS

Laboratory of Archaeometry,
Institute of Nanoscience and Nanotechnology,
N.C.S.R. 'Demokritos', 153 10 Aghia Paraskevi,
Greece
Email: y.maniatis@inn.demokritos.gr

OLGA PHILANIOTOU

Skylitsi 23a, 11473 Athens, Greece
Email: olgaphil@otenet.gr

COLIN RENFREW

McDonald Institute for Archaeological Research
Downing Street, Cambridge, CB2 3ER, UK
Email: acr10@cam.ac.uk

PEGGY SOTIRAKOPOULOU

35 Laskou Street, Pangrati, 116 33 Athens, Greece
Email: psotirakopoulou@gmail.com

DIMITRIS TAMBAKOPOULOS

Laboratory of Archaeometry,
Institute of Nanoscience and Nanotechnology,
N.C.S.R. 'Demokritos', 153 10 Aghia Paraskevi,
Greece
Email: dimitris17@gmail.com

Figures and Plates

Frontispiece: *Torso, waist, pelvis and upper legs of folded-arm figurine of Spedos variety.*

Chapter 1

1.1.	<i>Plan of the Special Deposit South.</i>	4
1.2.	<i>The development of the Early Cycladic sculptures, showing the principal types and varieties.</i>	8
1.3.	<i>The Kapsala variety.</i>	9
1.4.	<i>The Spedos variety.</i>	9
1.5.	<i>The Kavos sub-variety.</i>	11
1.6.	<i>The Dokathismata variety.</i>	12
1.7.	<i>The Akrotiri sub-variety of the Dokathismata variety.</i>	12
1.8.	<i>The Chalandriani variety.</i>	13
1.9.	<i>The Kea sub-variety of the Chalandriani variety.</i>	14
1.10.	<i>The Special Deposit North sub-variety of the Chalandriani variety.</i>	15
1.11.	<i>The Apeiranthos variety.</i>	17
1.12.	<i>The Dhaskalio sub-variety of the Apeiranthos variety.</i>	17

Chapter 2

2.1.	<i>Estimated original heights of folded-arm figure fragments from the Special Deposit South.</i>	20
2.2.	<i>The treatment of the hair on heads of the Spedos variety.</i>	22
2.3.	<i>Paint ghost of the hair at the crown of the head.</i>	23
2.4.	<i>Eyes seen as paint ghosts on figurine heads of the Spedos and Dokathismata varieties.</i>	24
2.5.	<i>The head of 6275, where the left eye can just be seen.</i>	25
2.6.	<i>Estimated original size range for sculptures of Spedos variety from the Special Deposit South.</i>	25
2.7.	<i>Figure fragments of the Kavos sub-variety from archaeological excavations or known before 1913.</i>	27
2.8.	<i>Estimated original size range for sculptures of Dokathismata variety from the Special Deposit South.</i>	30
2.9.	<i>Figurine fragments of the Akrotiri sub-variety from archaeological excavations or known before 1913.</i>	30
2.10.	<i>Estimated original size range for sculptures of the Chalandriani variety from the Special Deposit South.</i>	32
2.11.	<i>Figurine fragments of the Kea sub-variety from archaeological excavations or known before 1913.</i>	33
2.12.	<i>Detail of torso 2032 showing incisions of the fingers of the left hand.</i>	33
2.13.	<i>The section at the lower break of 2032 indicating the fine quality of the workmanship.</i>	33
2.14.	<i>Detail of the hands of torso 6614.</i>	34
2.15.	<i>Torso 6614, seen from above, indicating the regularity of the execution.</i>	34
2.16.	<i>Estimated original size range for sculptures of the Keros variety from the Special Deposit South.</i>	35
2.17.	<i>The hands and lower arms of 20518.</i>	35
2.18.	<i>The horizontal section of torso 20518, seen at the lower break.</i>	35
2.19.	<i>Incisions, perhaps representing a baldric, on torso 20518.</i>	36
2.20.	<i>Torso of male figure 4605 with the Keros flautist.</i>	38
2.21.	<i>The head 2194 compared with the head of the Keros harpist.</i>	39

Chapter 3

3.1.	<i>Sculptures of Spedos or Kapsala variety.</i>	46
3.2.	<i>Sculpture of Kavos sub-variety of Spedos variety.</i>	47
3.3.	<i>Sculpture of Kavos sub-variety of Spedos variety.</i>	48
3.4.	<i>Sculpture of Kavos sub-variety of Spedos variety.</i>	49
3.5.	<i>Heads of folded-arm figurines Spedos variety.</i>	51
3.6.	<i>Heads of folded-arm figurines of Spedos variety.</i>	52
3.7.	<i>Heads of folded-arm figurines of Spedos variety.</i>	54
3.8.	<i>Heads of folded-arm figurines of Spedos variety.</i>	55
3.9.	<i>Heads of folded-arm figurines of Spedos variety.</i>	56
3.10.	<i>Heads of folded-arm figurines of Spedos variety.</i>	58
3.11.	<i>Heads of folded-arm figurines of Spedos variety.</i>	60
3.12.	<i>Heads of folded-arm figurines of Spedos variety.</i>	61

3.13.	<i>Heads of folded-arm figurines of Spedos variety.</i>	63
3.14.	<i>Heads of folded-arm figurines of Spedos variety.</i>	64
3.15.	<i>Heads of folded-arm figurines of Spedos variety.</i>	65
3.16.	<i>Necks of folded-arm figurines of Spedos variety.</i>	66
3.17.	<i>Necks of folded-arm figurines of Spedos variety.</i>	67
3.18.	<i>Torso to upper legs of folded-arm figurine of Spedos variety.</i>	68
3.19.	<i>Torso to upper legs of folded-arm figurine of Spedos variety.</i>	69
3.20.	<i>Torso to upper legs of folded-arm figurine of Spedos variety.</i>	70
3.21.	<i>Torso to upper legs of folded-arm figurine of Spedos variety.</i>	71
3.22.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	72
3.23.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	74
3.24.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	75
3.25.	<i>Torso of folded-arm figurine of Spedos variety.</i>	76
3.26.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	77
3.27.	<i>Torso of folded-arm figurine of Spedos variety.</i>	78
3.28.	<i>Torso of folded-arm figurine of Spedos variety.</i>	79
3.29.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	80
3.30.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	81
3.31.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	82
3.32.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	83
3.33.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	85
3.34.	<i>Torso of folded-arm figurine of Spedos variety.</i>	86
3.35.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	87
3.36.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	88
3.37.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	89
3.38.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	90
3.39a.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	91
3.39b.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	92
3.40.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	94
3.41.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	95
3.42.	<i>Torsos of folded-arm figurines of Spedos variety.</i>	97
3.43.	<i>Waists of folded-arm figurines of Spedos variety.</i>	98
3.44.	<i>Waists of folded-arm figurines of Spedos variety.</i>	99
3.45.	<i>Waist of folded-arm figurine of Spedos variety.</i>	100
3.46.	<i>Waist and pelvis of folded-arm figurine of Spedos variety.</i>	102
3.47.	<i>Waist and pelvis of folded-arm figurine of Spedos variety.</i>	103
3.48.	<i>Waist of folded-arm figurine of Spedos variety.</i>	104
3.49.	<i>Pelvis of folded-arm figurine of Spedos variety.</i>	105
3.50.	<i>Waist, pelvis and upper legs of folded-arm figurine of Spedos variety.</i>	106
3.51.	<i>Waist of folded-arm figurine of Spedos variety.</i>	108
3.52.	<i>Waist of folded-arm figurine of Spedos variety.</i>	108
3.53.	<i>Waists of folded-arm figurines of Spedos variety.</i>	109
3.54.	<i>Waists of folded-arm figurines of Spedos variety.</i>	110
3.55.	<i>Waists of folded-arm figurines of Spedos variety.</i>	111
3.56a.	<i>Waists of folded-arm figurines of Spedos variety.</i>	112
3.56b.	<i>Waists of folded-arm figurines of Spedos variety.</i>	113
3.57.	<i>Waist of folded-arm figurine of Spedos variety.</i>	114
3.58.	<i>Pelvis and legs of folded-arm figurine of Spedos variety.</i>	115
3.59.	<i>Pelvis and legs of folded-arm figurine of Spedos variety.</i>	116
3.60.	<i>Pelvis and legs of folded-arm figurine of Spedos variety.</i>	117
3.61.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	119
3.62.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	120
3.63.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	121
3.64.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	123

3.65.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	124
3.66.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	127
3.67.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	128
3.68.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	129
3.69.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	130
3.70.	<i>Pelves of folded-arm figurines of Spedos variety.</i>	131
3.71.	<i>Legs of folded-arm figurine of Spedos variety.</i>	132
3.72.	<i>Legs of folded-arm figurine of Spedos variety.</i>	133
3.73.	<i>Legs of folded-arm figurines of Spedos variety.</i>	135
3.74.	<i>Legs of folded-arm figurines of Spedos variety.</i>	136
3.75.	<i>Legs of folded-arm figurines of Spedos variety.</i>	137
3.76.	<i>Leg of folded-arm figurine of Spedos variety.</i>	138
3.77.	<i>Legs of folded-arm figurines of Spedos variety.</i>	140
3.78.	<i>Legs of folded-arm figurines of Spedos variety.</i>	141
3.79.	<i>Legs of folded-arm figurines of Spedos variety.</i>	143
3.80.	<i>Legs of folded-arm figurines of Spedos variety.</i>	144
3.81.	<i>Legs of folded-arm figurines of Spedos variety.</i>	146
3.82.	<i>Legs of folded-arm figurines of Spedos variety.</i>	147
3.83.	<i>Legs of folded-arm figurines of Spedos variety.</i>	149
3.84.	<i>Legs of folded-arm figurines of Spedos variety.</i>	150
3.85.	<i>Legs of folded-arm figurines of Spedos variety.</i>	151
3.86.	<i>Legs of folded-arm figurines of Spedos variety.</i>	152
3.87.	<i>Legs of folded-arm figurines of Spedos variety.</i>	154
3.88.	<i>Legs of folded-arm figurines of Spedos variety.</i>	155
3.89.	<i>Legs of folded-arm figurines of Spedos variety.</i>	156
3.90.	<i>Legs of folded-arm figurines of Spedos variety.</i>	158
3.91.	<i>Legs of folded-arm figurines of Spedos variety.</i>	160
3.92.	<i>Legs of folded-arm figurines of Spedos variety.</i>	161
3.93.	<i>Legs of folded-arm figurines of Spedos variety.</i>	163
3.94.	<i>Legs of folded-arm figurines of Spedos variety.</i>	164
3.95.	<i>Legs of folded-arm figurines of Spedos variety.</i>	165
3.96.	<i>Legs of folded-arm figurines of Spedos variety.</i>	168
3.97.	<i>Legs of folded-arm figurines of Spedos variety.</i>	169
3.98.	<i>Legs of folded-arm figurines of Spedos variety.</i>	170
3.99.	<i>Legs of folded-arm figurines of Spedos variety.</i>	171
3.100.	<i>Feet of folded-arm figurines of Spedos variety.</i>	174
3.101.	<i>Feet of folded-arm figurines of Spedos variety.</i>	175
3.102.	<i>Feet of folded-arm figurines of Spedos variety.</i>	176
3.103.	<i>Feet of folded-arm figurines of Spedos variety.</i>	177
3.104.	<i>Feet of folded-arm figurines of Spedos variety.</i>	178
3.105.	<i>Feet of folded-arm figurines of Spedos variety.</i>	179
3.106.	<i>Torsos of folded-arm figurines of Akrotiri sub-variety of Dokathismata variety.</i>	181
3.107.	<i>Torsos of folded-arm figurines of Akrotiri sub-variety of Dokathismata variety.</i>	182
3.108.	<i>Heads of folded-arm figurines of Dokathismata variety.</i>	183
3.109.	<i>Heads of folded-arm figurines of Dokathismata variety.</i>	185
3.110.	<i>Heads of folded-arm figurines of Dokathismata variety.</i>	186
3.111.	<i>Heads of folded-arm figurines of Dokathismata variety.</i>	187
3.112.	<i>Necks of folded-arm figurines of Dokathismata variety.</i>	189
3.113.	<i>Torsos of folded-arm figurines of Dokathismata variety.</i>	191
3.114.	<i>Torsos of folded-arm figurines of Dokathismata variety.</i>	192
3.115.	<i>Torsos of folded-arm figurines of Dokathismata variety.</i>	194
3.116.	<i>Torsos of folded-arm figurines of Dokathismata variety.</i>	196
3.117.	<i>Torsos of folded-arm figurines of Dokathismata variety.</i>	197
3.118.	<i>Torso (top) and waists of folded-arm figurines of Dokathismata variety.</i>	198

3.119.	<i>Pelves of folded-arm figurines of Dokathismata variety.</i>	201
3.120.	<i>Legs of folded-arm figurines of Dokathismata variety.</i>	202
3.121.	<i>Legs of folded-arm figurines of Dokathismata variety.</i>	204
3.122.	<i>Feet of folded-arm figurines of Dokathismata variety.</i>	206
3.123.	<i>Feet of folded-arm figurines of Dokathismata variety.</i>	207
3.124.	<i>Torso and waist of folded-arm figurines of Kea sub-variety of Chalandriani variety.</i>	209
3.125.	<i>Heads of folded-arm figurines of Chalandriani variety.</i>	210
3.126.	<i>Heads of folded-arm figurines of Chalandriani variety.</i>	212
3.127.	<i>Head (top) and necks of folded-arm figurines of Chalandriani variety.</i>	213
3.128.	<i>Torso of folded-arm figurine of Chalandriani variety.</i>	215
3.129.	<i>Torso of folded-arm figurine of Chalandriani variety.</i>	216
3.130.	<i>Torsos of folded-arm figurines of Chalandriani variety.</i>	217
3.131.	<i>Torsos of folded-arm figurines of Chalandriani variety.</i>	218
3.132.	<i>Pelves, legs and feet of folded-arm figurines of Chalandriani variety.</i>	219
3.133.	<i>Folded-arm figurines of Keros variety.</i>	222
3.134.	<i>Heads of folded-arm figurines of Keros variety.</i>	223
3.135.	<i>Torso of folded-arm figurine of Keros variety.</i>	224
3.136.	<i>Torsos of folded-arm figurines of Keros variety.</i>	226
3.137.	<i>Waists and pelvis of folded-arm figurines of Keros variety.</i>	227
3.138.	<i>Feet of folded-arm figurines of Keros variety.</i>	229
3.139.	<i>Unfinished folded-arm figurine.</i>	230
3.140.	<i>Unfinished folded-arm figurines.</i>	231
3.141.	<i>Unfinished folded-arm figurines.</i>	232
3.142.	<i>Fragmentary and indeterminate folded-arm figurines.</i>	234
3.143.	<i>Fragmentary and indeterminate folded-arm figurines.</i>	235
3.144.	<i>Fragmentary and indeterminate folded-arm figurines.</i>	237
3.145.	<i>Sculptures of action type.</i>	238
3.146.	<i>Sculpture of action type.</i>	239
3.147.	<i>Sculptures of other type.</i>	240
3.148.	<i>Sculptures of other type.</i>	241
3.149.	<i>Schematic figurines of Dhaskalio sub-variety of Apeiranthos variety.</i>	242
3.150.	<i>Schematic figurines of Dhaskalio sub-variety of Apeiranthos variety.</i>	245
3.151.	<i>Schematic figurines of Dhaskalio sub-variety of Apeiranthos variety.</i>	246
3.152.	<i>Schematic figurines of Dhaskalio sub-variety of Apeiranthos variety.</i>	247
3.153.	<i>Schematic figurines of Dhaskalio sub-variety of Apeiranthos variety.</i>	248
3.154.	<i>Schematic figurine of Dhaskalio sub-variety of Apeiranthos variety.</i>	249
3.155.	<i>Schematic figurine of Apeiranthos variety.</i>	250
3.156.	<i>Schematic figurines of Apeiranthos variety.</i>	251
3.157.	<i>Schematic figurines of uncertain variety.</i>	253
 Chapter 4		
4.1.	<i>Schematic illustration of the main shapes of vessels.</i>	266–9
4.2.	<i>Rim-shape variants among rolled-rim vessels.</i>	270
4.3.	<i>Marble rolled-rim bowls of variant A.</i>	270
4.4.	<i>Marble rolled-rim bowls of variant B.</i>	271
4.5.	<i>Marble rolled-rim bowls of variant C.</i>	272
4.6.	<i>Marble rolled-rim bowls of variant D.</i>	272
4.7.	<i>Marble rolled-rim bowls of variant E.</i>	273
4.8.	<i>Marble rolled-rim bowls of variant F.</i>	274
4.9.	<i>Marble plain rim bowls with plain pointed rim.</i>	279
4.10.	<i>Marble plain rim bowls with rounded rim.</i>	279
4.11.	<i>Marble plain rim bowls with flat rim with rectangular section.</i>	279
4.12.	<i>Bases of marble bowls.</i>	280
4.13.	<i>Marble rolled-rim basins of variants A, B and C.</i>	291

4.14.	<i>Marble rolled-rim basins of variants D and E.</i>	292
4.15.	<i>Bases of marble basins.</i>	293
4.16.	<i>Rims of marble cups.</i>	299
4.17.	<i>Rims of marble saucers.</i>	299
4.18.	<i>Bases of marble cups and saucers.</i>	299
4.19.	<i>Marble lugged bowl fragments.</i>	301
4.20.	<i>Marble spouted bowl fragment.</i>	302
4.21.	<i>Marble ledge-lug bowl fragments.</i>	303
4.22.	<i>Marble ledge-lug cup fragment.</i>	304
4.23.	<i>Marble ledge-lug bowl fragments.</i>	304
4.24.	<i>Marble one-handed cylindrical plate fragments.</i>	305
4.25.	<i>Marble avian dish fragments.</i>	306
4.26.	<i>Hemispherical footed bowl fragments.</i>	307
4.27.	<i>Rims of carinated cups.</i>	308
4.28.	<i>Carinated cup base fragments.</i>	308
4.29.	<i>Pedestal bases.</i>	309
4.30.	<i>Marble krateriskos fragments.</i>	310
4.31.	<i>Pedestal bases.</i>	310
4.32.	<i>Marble lid fragments.</i>	311
4.33.	<i>Marble cylindrical spool pyxis fragments.</i>	311
4.34.	<i>Grey limestone rolled-rim bowl fragments.</i>	312
4.35.	<i>Grey limestone plain rim bowl fragments.</i>	312
4.36.	<i>Grey limestone bowl base fragments.</i>	313
4.37.	<i>Grey limestone cup and saucer rim fragments.</i>	314
4.38.	<i>Grey limestone lugged bowl fragments.</i>	315
4.39.	<i>Grey limestone spouted bowl fragment.</i>	315
4.40.	<i>Grey limestone ledge-lug cup rim and one-handed cylindrical plate fragments.</i>	315
4.41.	<i>Grey limestone footed cup or bowl base fragments.</i>	316
4.42.	<i>Grey limestone stems or feet of hemispherical footed bowls.</i>	316
4.43.	<i>Grey limestone spherical pyxis fragment.</i>	317
4.44.	<i>Grey limestone lid fragment.</i>	317
4.45.	<i>Coloured Kouphonisi limestone rounded rim bowl fragments.</i>	318
4.46.	<i>Coloured Kouphonisi limestone flat rim bowl fragments.</i>	320
4.47.	<i>Coloured Kouphonisi limestone bowl base fragments.</i>	321
4.48.	<i>Coloured Kouphonisi limestone cup rim fragments.</i>	323
4.49.	<i>Coloured Kouphonisi limestone cup base fragments.</i>	324
4.50.	<i>Coloured Kouphonisi limestone spherical pyxis fragment.</i>	325
4.51.	<i>Coloured Kouphonisi limestone lid fragment.</i>	325
4.52.	<i>Coloured Kouphonisi limestone zoomorphic vessel fragments.</i>	325
4.53.	<i>Talc schist spherical pyxis fragments, all from the same vessel.</i>	328
4.54.	<i>Talc schist spherical pyxis fragments, all from the same vessel.</i>	328
4.55.	<i>Talc schist spherical pyxis fragments.</i>	329
4.56.	<i>Talc schist spherical pyxis fragments.</i>	329
4.57.	<i>Talc schist rectangular pyxis fragments.</i>	330
4.58.	<i>Chlorite schist conical cup fragments.</i>	331
4.59.	<i>Chlorite schist spherical pyxis fragments.</i>	332
4.60.	<i>Chlorite schist foot fragment.</i>	332
4.61.	<i>Black schist ledge lug miniature cup fragment.</i>	332
4.62.	<i>Distribution of stone vessel fragments.</i>	333
4.63.	<i>Distribution of stone vessel fragments by material</i>	337
4.64.	<i>Joining pieces of marble.</i>	338
4.65.	<i>Joining pieces of coloured limestone.</i>	339
4.66.	<i>Joining pieces of talc schist.</i>	340
4.67.	<i>Joining pieces of talc schist.</i>	340

4.68.	<i>Joining pieces of talc schist.</i>	340
4.69.	<i>Fragment 345, showing perforation.</i>	341
4.70.	<i>Linear regression of rim diameter on wall thickness of fragments drawn from the Special Deposit South and Special Deposit North assemblages.</i>	343
4.71.	<i>Exponential regression of rim diameter on wall thickness of fragments drawn from the Special Deposit South and Special Deposit North assemblages.</i>	343
4.72.	<i>Rim diameters of bowl fragments recovered from the Special Deposit North in 1987.</i>	344
4.73.	<i>Wall thicknesses of bowl fragments recovered from the Special Deposit North in 1987.</i>	344
4.74.	<i>Percentage rim circumference surviving against rim diameter from the Special Deposit North in 1987.</i>	345
4.75.	<i>Percentage rim circumference surviving against maximum dimension from the Special Deposit North in 1987.</i>	345
4.76.	<i>Rim diameters of bowl rim fragments recovered from the Special Deposit South in 2006-8.</i>	347
4.77.	<i>Rim diameters of bowl rim fragments recovered from the Special Deposit North in 1987 and the Special Deposit South in 2006-8.</i>	347
4.78.	<i>Wall thicknesses of bowl rim fragments recovered from the Special Deposit South in 2006-8.</i>	348
4.79.	<i>Wall thicknesses of bowl rim fragments recovered from the Special Deposit North in 1987 and the Special Deposit South in 2006-8.</i>	348
4.80.	<i>Percentage rim surviving against diameter for the Special Deposit South.</i>	349
4.81.	<i>Rim fragments with measured rim diameters in the Special Deposit South.</i>	350
4.82.	<i>Rim fragments with measured wall thicknesses in the Special Deposit South.</i>	351
4.83.	<i>Rim fragments with rim diameters of 350 mm or more in the Special Deposit South.</i>	352
4.84.	<i>Rim fragments with wall thicknesses of 12 mm or more in the Special Deposit South.</i>	353

Chapter 5

5.1.	<i>Overview of the geological sampling areas in the Cycladic Islands.</i>	356
5.2.	<i>Keros: crystalline limestones and marbles, and sampling locations.</i>	358
5.3.	<i>Box plots of the measured parameters for the Keros marble.</i>	359
5.4.	<i>Bivariate diagram of $\text{Ln}(\text{Mn}^{2+})$ versus $\text{Ln}(\text{MGS})$ for the 3 groups of Keros marbles.</i>	360
5.5.	<i>Bivariate diagram of stable isotope signatures.</i>	360
5.6.	<i>Map of Naxos showing marble zones, sampled areas, prehistoric sites, and ancient marble quarries.</i>	361
5.7.	<i>A large marble deposit located on the east hill above the Spedos bay in southeast Naxos.</i>	362
5.8.	<i>Marble deposit of grey colour south of Volakas 'port' in southeast Naxos.</i>	362
5.9.	<i>House-wall built of grey and dark-blue marble on Dhaskalio.</i>	364
5.10.	<i>Veins of good quality calcitic marble in central-east Naxos close to Moutsouna Bay.</i>	364
5.11.	<i>Naxos box plots of the measured parameters for the various marble groups.</i>	365
5.12.	<i>Bivariate plot of $\text{Ln}(\text{Mn}^{2+})$ versus $\text{Ln}(\text{MGS})$ for Naxos.</i>	366
5.13.	<i>Bivariate plot of stable isotope signatures for Naxos.</i>	366
5.14.	<i>Bivariate plot of stable isotope signatures for all the calcitic and all dolomitic marbles of Naxos.</i>	366
5.15.	<i>Map of Paros with marble zones and sampling areas.</i>	367
5.16.	<i>Box plots of the measured parameters for the Paros marbles.</i>	368
5.17.	<i>Bivariate plot of $\text{Ln}(\text{Mn}^{2+})$ versus $\text{Ln}(\text{MGS})$ for the Paros marble groups.</i>	369
5.18.	<i>Bivariate plot of stable isotope signatures for the Paros marble groups.</i>	369
5.19.	<i>The island of Nikouria, showing marble distribution and sampling points.</i>	369
5.20.	<i>Box plots of the measured parameters for the Nikouria marbles.</i>	370
5.21.	<i>Bivariate plots of $\text{Ln}(\text{Mn}^{2+})$ versus $\text{Ln}(\text{MGS})$ and stable isotopes for the Nikouria marbles.</i>	371
5.22.	<i>Map of Ios showing marble distribution, sampled areas and prehistoric sites.</i>	371
5.23.	<i>Box plots of the measured parameters for the Ios marble groups.</i>	372
5.24.	<i>Bivariate plot of $\text{Ln}(\text{Mn}^{2+})$ versus $\text{Ln}(\text{MGS})$ for the Ios marble groups.</i>	373
5.25.	<i>Bivariate plot of the stable isotopes for the Ios marble groups.</i>	373
5.26.	<i>Bivariate plot of the stable isotope signatures of all calcitic and all dolomitic marbles of Ios.</i>	373
5.27.	<i>Map of Schoinoussa and Iraklia with distribution of schist and marble.</i>	374
5.28.	<i>Map of Syros showing marble zones, sampled areas and prehistoric sites.</i>	375
5.29.	<i>Box plots of the measured parameters for the Syros marbles.</i>	376
5.30.	<i>Bivariate plot of $\text{Ln}(\text{Mn}^{2+})$ versus $\text{Ln}(\text{MGS})$ for the north Syros calcitic marbles.</i>	377

5.31.	<i>Bivariate plot of stable isotope signatures for the Syros marble groups.</i>	377
5.32.	<i>Box plot diagram of the MGS for the various groups of Cycladic Marbles.</i>	377
5.33.	<i>Box plot diagram of the Mn²⁺ parameter for the various groups of Cycladic marbles.</i>	377
5.34.	<i>Box plot diagram of the Width parameter for the various groups of Cycladic marbles.</i>	378
5.35.	<i>Box plot diagram of Fe³⁺ parameter for the various groups of Cycladic Islands.</i>	378
5.36.	<i>Box plot diagram of the $\delta^{13}\text{C}_{\text{‰}}$ parameter for the various groups of Cycladic marbles.</i>	378
5.37.	<i>Box plot diagram of the $\delta^{18}\text{O}_{\text{‰}}$ parameter for the various groups of Cycladic groups.</i>	378
5.38.	<i>Bivariate diagram of Ln(Mn²⁺) versus Ln(MGS) for the various Cycladic marble groups.</i>	379
5.39.	<i>Bivariate diagram of $\delta^{13}\text{C}_{\text{‰}}$ versus $\delta^{18}\text{O}_{\text{‰}}$ for the various Cycladic marble groups.</i>	379
5.40.	<i>Example of transparency and grain size examination with a cold light source.</i>	380
5.41.	<i>Heavily weathered figurine.</i>	380
5.42.	<i>Typical figurine sampling spot.</i>	381
5.43.	<i>Histogram showing the distribution of the MGS measured for all the figurines.</i>	395
5.44.	<i>MGS distribution of Spedos variety, including the Kavos sub-variety.</i>	395
5.45.	<i>MGS distribution of Dokathismata, Akrotiri sub-variety, fragmentary and indeterminate, Chalandriani, and Keros varieties.</i>	396
5.46.	<i>MGS of figurines of Apeiranthos variety, Dhaskalio sub-variety, schematic figurines of uncertain variety, unfinished folded-arm figurines, and figurines of other type.</i>	397
5.47.	<i>Histogram showing the distribution of marble colours observed in all figurines.</i>	398
5.48.	<i>Histogram showing the distribution of marble colours observed in figurines of Spedos variety.</i>	398
5.49.	<i>Distribution of marble colours for figurines of various varieties and sub-varieties.</i>	399
5.50.	<i>Distribution of marble colours for figurines of various types and varieties.</i>	400
5.51.	<i>Characteristic EPR spectrum of calcitic marble containing dolomite.</i>	403
5.52.	<i>Bivariate diagram of Ln(Mn²⁺) versus Ln(MGS) for the Keros figurines against the various marble groups of the Cycladic Islands.</i>	404
5.53.	<i>Diagram of $\delta^{13}\text{C}_{\text{‰}}$ versus $\delta^{18}\text{O}_{\text{‰}}$ parameters for the Keros figurines against the various marble groups of the Cycladic Islands.</i>	404
5.54.	<i>Discriminant analysis between the marble groups.</i>	406
5.55.	<i>General provenance histogram for all figurines by island.</i>	410
5.56.	<i>Provenance histogram for all figurines by marble group.</i>	410
5.57.	<i>Provenance of all Spedos variety figurines analysed.</i>	412
5.58.	<i>Provenance of all Dokathismata variety figurines analysed.</i>	412
5.59.	<i>Provenance of all Chalandriani variety figurines analysed.</i>	412
5.60.	<i>Provenance of all Keros variety figurines analysed.</i>	413
5.61.	<i>Provenance of all Apeiranthos variety figurines analysed.</i>	413
5.62.	<i>Provenance of figurines of the Dhaskalio sub-variety analysed.</i>	413
5.63.	<i>Provenance of the unfinished folded-arm figurines analysed.</i>	413
5.64.	<i>View of Kouphonisi and Keros from Pyrgos Kanaki (southeast Naxos).</i>	418
5.65.	<i>View of Kouphonisi and Keros from the Moutsouna-Apeiranthos road (central-east Naxos).</i>	418
5.66.	<i>Guide to the places of origin of the Keros figurines by type or variety.</i>	419
5.67.	<i>Histogram of MGS distribution for all vessel fragments examined.</i>	421
5.68.	<i>Histogram of MGS distribution among the various types of vessels.</i>	421
5.69.	<i>Histogram of marble colour distribution among the 140 vessels fragments examined.</i>	422
5.70.	<i>Histogram of marble colour distribution for all the bowls examined.</i>	422
5.71.	<i>Histogram of marble colour distribution for all the basins examined.</i>	422
5.72.	<i>Diagram of Ln(Mn²⁺) versus Ln(MGS) parameters for the Keros marble vessels against the various marble groups of the Cycladic Islands.</i>	425
5.73.	<i>Diagram of $\delta^{13}\text{C}_{\text{‰}}$ versus $\delta^{18}\text{O}_{\text{‰}}$ parameters for the Keros marble vessels against the various marble groups of the Cycladic Islands.</i>	425
5.74.	<i>Summarized provenance results for all vessels analysed, by island.</i>	426
5.75.	<i>Summarized provenance results for all vessels analysed, by different marble group.</i>	428
5.76.	<i>Summarized provenance results for all bowls analysed, by different marble group.</i>	428
5.77.	<i>Summarized provenance results for the basins analysed, by different marble group.</i>	428
5.78.	<i>Vessel 192 made of dull grey marble with striations.</i>	428

5.79.	Wall built with local slabs of blue/grey marble with white striations at Kastro Kanaki in southeast Naxos.	429
5.80.	Vessel 364 made of a white transparent marble.	430

Chapter 6

6.1.	Plan of Dhaskalio and Kavos, showing the location of excavation trenches.	436
6.2.	Overall plan of the Dhaskalio trenches at the end of excavation.	437

Chapter 7

7.1.	Total variation distributions of random subsets of the data set.	495
7.2.	Hierarchical clustering of the data set.	496
7.3.	Principal component analysis of the data set.	499

Chapter 8

8.1.	Reflected light photomicrograph of sample from K7P18 showing fayalite, magnetite, matte prills, in glass.	506
8.2.	Reflected light photomicrograph of sample from KN65, showing large magnetite aggregate in slag with elongated kirschsteinite, magnetite, and numerous copper prills, in glass.	506
8.3.	SEM BSE image of sample from K7P32, showing a large dense iron oxide phase.	509
8.4.	Reflected light photomicrograph of sample from MKN7, showing rounded and angular iron oxides, numerous small bright copper prills, and secondary corroded phases.	509
8.5.	SEM BSE image of sample from KN172, showing vitrified porous interface of ceramic with glassy 'slag'.	511
8.6.	Reflected light photomicrograph of sample from K7P14, showing pyroxenes, magnetites in glass matrix with vitrified ceramic areas.	511
8.7.	Reflected light photomicrograph of slag on metallurgical ceramic KN190, showing glassy matrix and numerous prills.	512
8.8.	Lead isotope analysis diagrams for Kavos Promontory finds.	512
8.9.	SEM BSE image of sample from 14051 , showing ceramic and on top layer of corroded metal spill.	514
8.10.	Reflected light photomicrograph of sample from 10167 , showing fayalite, magnetites, glass, and numerous copper prills.	518
8.11.	Reflected light photomicrograph of sample from 8309 , showing fayalite, magnetites, glass, and infrequent copper prills.	518
8.12.	Reflected light photomicrograph of sample from 5059 after etching.	519
8.13.	SEM BSE image of sample from 14065 , showing pyroxenes, olivines, and iron oxides with interstitial glass and minute prills.	521
8.14.	SEM BSE image of sample from 14065 , showing copper prill, partly surrounded by lead metal.	521
8.15.	SEM BSE image of sample from 11541 , showing Fe ₂ (As, Sb), Fe(Sb, As), corroded areas and few silver antimonide prills.	523
8.16.	SEM BSE image of analysed silver antimonide prill in sample from 11541 , showing uncorroded area at centre of sample.	523
8.17.	Adze-axe 12734 and 12735 showing sampling location.	524
8.18.	Reflected light photomicrograph of sample from 12734 showing directional porosity.	524
8.19.	Reflected light photomicrograph of sample from 12734 after etching.	524
8.20.	Chisel 12740 showing sampling location and extracted sample.	525
8.21.	Reflected light photomicrograph of sample from 12740 after etching.	525
8.22.	Lead isotope analysis diagrams for Dhaskalio and Kavos Promontory copper-based finds.	526
8.23.	Lead isotope analysis diagrams for Dhaskalio and Kavos Special Deposit North lead-based finds.	527

Chapter 9

9.1.	Objects found on and above Floor P in Trench I on Dhaskalio.	542
9.2.	Funnel necked jars found on and above Floor Q in Trench I on Dhaskalio.	543

Colour plates (at rear)

Plate 1a.	The islet of Dhaskalio from Kavos (from the northeast).	585
Plate 1b.	The islet of Dhaskalio from Kavos (from the southeast).	585
Plate 2a.	Dhaskalio from above, from the northeast, with Trenches I and II in the foreground.	586

Plate 2b. <i>The Special Deposit South from above (north-northeast is to the left).</i>	586
Plate 3a. <i>2010 in situ in Trench D2 layer 3.</i>	587
Plate 3b. <i>437 in situ in Trench D3 layer 5.</i>	587
Plate 4a. <i>1989, 1990 and 1992 in situ in Trench C1 layer 21.</i>	588
Plate 4b. <i>1987, 1988 and 1989 in situ in Trench C1 layer 21.</i>	588
Plate 5. <i>Figurine fragments of Spedos variety.</i>	589
Plate 6. <i>Figurine fragments of Dokathismata variety.</i>	590
Plate 7. <i>Figurine fragments of Chalandriani variety.</i>	591
Plate 8. <i>Figurine fragments of Keros variety.</i>	592
Plate 9. <i>Fragments of schematic figurines.</i>	593
Plate 10. <i>Figurine fragments of Akrotiri sub-variety of Dokathismata variety and Kea sub-variety of Chalandriani variety.</i>	594
Plate 11. <i>Waist (2207) and pelvis (6478) of folded-arm figurine of Spedos variety.</i>	595
Plate 12. <i>Marble vessel fragments from Trench C1, layer 21 and Kouphonisi limestone vessel fragments.</i>	596
Plate 13. <i>Metal objects from the Hall.</i>	597
Plate 14. <i>Photomicrographs of examples for petrographic fabric groups.</i>	598
Plate 15. <i>Photomicrographs of examples for petrographic fabric groups.</i>	599
Plate 16. <i>Photomicrographs of examples for petrographic fabric groups.</i>	600

Tables

Chapter 2

2.1. <i>Frequencies of occurrence of types, varieties and sub-varieties of figurine fragments of the Special Deposit South.</i>	19
--	----

Chapter 3

3.1. <i>List of comparandum pieces by museum number, context and references.</i>	44
3.2. <i>Concordance of special find numbers, Naxos Museum numbers, and figure numbers.</i>	255

Chapter 4

4.1. <i>Total number of artefacts according to raw materials and frequency of occurrence of raw materials.</i>	262
4.2. <i>Numbers and percentages of stone vessel fragments in different materials assigned to preservation scale.</i>	262
4.3. <i>Stone vessels found in the area of the Special Deposit South during the 1987 surface survey.</i>	264–5
4.4. <i>Quantities of the basic variants of the rolled-rim marble bowls.</i>	271
4.5. <i>Rims of rolled-rim bowls.</i>	274–8
4.6. <i>Marble plain bowl rims.</i>	279
4.7. <i>Quantitative relationship between base thickness and estimated base diameter.</i>	281
4.8. <i>Bases of marble bowls.</i>	281–3
4.9. <i>Quantitative relationship between thickness and estimated body diameters in white marble bowl body fragments.</i>	284
4.10 <i>White marble bowl body fragments.</i>	285–9
4.11. <i>Grey marble bowl body fragments.</i>	289
4.12. <i>Marble basin rim fragments.</i>	290
4.13. <i>Quantitative relationship of base thickness to estimated base diameters in marble basin base fragments.</i>	294
4.14. <i>Bases of marble basins.</i>	294–5
4.15. <i>Quantitative relationship of body thickness to estimated diameter in basin body fragments.</i>	296
4.16. <i>Marble basin body fragments.</i>	297
4.17. <i>Rims of marble cups.</i>	298
4.18. <i>Rims of marble saucers.</i>	298
4.19. <i>Bases of marble cups and saucers.</i>	298
4.20. <i>White marble cup and saucer body fragments.</i>	300
4.21. <i>Grey marble cup and saucer body fragments.</i>	300
4.22. <i>Marble lugged bowl fragments.</i>	301

4.23.	<i>Marble spouted bowl fragment.</i>	302
4.24.	<i>Marble ledge-lug bowl fragments.</i>	303
4.25.	<i>Marble ledge-lug cup fragments.</i>	304
4.26.	<i>White marble palette fragments.</i>	304
4.27.	<i>White marble one-handled cylindrical vessel fragments.</i>	305
4.28.	<i>Marble avian dish fragments.</i>	306
4.29.	<i>Quantities of kylix footed cups according to sub-variety and raw material.</i>	307
4.30.	<i>Rims of hemispherical footed bowls.</i>	307
4.31.	<i>Rim fragments from carinated footed cups.</i>	308
4.32.	<i>Carinated cup body and base fragments.</i>	308
4.33.	<i>Marble pedestal bases.</i>	309
4.34.	<i>Marble krateriskos fragments.</i>	310
4.35.	<i>Marble pedestal fragments.</i>	310
4.36.	<i>Marble lid fragments.</i>	311
4.37.	<i>Marble cylindrical spool pyxis fragments.</i>	311
4.38.	<i>Grey Keros limestone rolled-rim bowls.</i>	312
4.39.	<i>Grey Keros limestone plain bowl rim fragments.</i>	312
4.40.	<i>Keros grey limestone bowl base fragments.</i>	313
4.41.	<i>Quantitative relationship of body thickness to diameter in Keros grey limestone bowl body fragments.</i>	314
4.42.	<i>Grey Keros limestone bowl body fragments.</i>	314
4.43.	<i>Rim fragments of cups and saucers of grey Keros limestone.</i>	314
4.44.	<i>Lugged bowl fragments of grey Keros limestone.</i>	315
4.45.	<i>Spouted bowls fragments of grey Keros limestone.</i>	315
4.46.	<i>Rim fragments of ledge-lug cups or bowls of grey Keros limestone.</i>	315
4.47.	<i>Frying pan base fragment of grey Keros limestone.</i>	316
4.48.	<i>Footed cup or bowl base fragments of grey Keros limestone.</i>	316
4.49.	<i>Stem and feet of hemispherical footed bowl fragments of grey Keros limestone.</i>	316
4.50.	<i>Spherical pyxis fragments of grey Keros limestone.</i>	317
4.51.	<i>Lid fragments of grey Keros limestone.</i>	317
4.52.	<i>Rounded rim fragments of plain bowls of coloured Kouphonisi limestone.</i>	318
4.53.	<i>Flat rim fragments of plain bowls of coloured Kouphonisi limestone.</i>	319
4.54.	<i>Bowl base fragments of coloured Kouphonisi limestone.</i>	320
4.55.	<i>Quantitative relationship of body thickness to diameter in body fragments of coloured Kouphonisi limestone bowls.</i>	322
4.56.	<i>Body fragments of coloured Kouphonisi limestone bowls.</i>	322–3
4.57.	<i>Cup rim fragments of coloured Kouphonisi limestone.</i>	323
4.58.	<i>Cup base fragments of coloured Kouphonisi limestone.</i>	324
4.59.	<i>Spouted bowl fragment of coloured Kouphonisi limestone.</i>	324
4.60.	<i>Spherical pyxis fragments of coloured Kouphonisi limestone.</i>	325
4.61.	<i>Hut lid fragment of coloured Kouphonisi limestone.</i>	325
4.62.	<i>Zoomorphic vessel fragments of coloured Kouphonisi limestone.</i>	325
4.63.	<i>Saucer fragment of talc schist.</i>	326
4.64.	<i>Spherical pyxis fragments of talc schist.</i>	326
4.65.	<i>Rectangular pyxis fragments of talc schist.</i>	330
4.66.	<i>Conical cup fragments of chlorite schist.</i>	331
4.67.	<i>Spherical pyxis fragments of chlorite schist.</i>	332
4.68.	<i>Foot fragment of chlorite schist.</i>	332
4.69.	<i>Black schist fragment.</i>	332
4.70.	<i>Quantities of marble fragments according to their type and findspot.</i>	334
4.71.	<i>Quantities of grey limestone fragments according to their type and findspot.</i>	335
4.72.	<i>Quantities of coloured limestone fragments according to their type and findspot.</i>	335
4.73.	<i>Quantities of talc schist fragments according to their type and findspot.</i>	336
4.74.	<i>Joining pieces of marble and their findspots.</i>	338
4.75.	<i>Joining pieces of grey limestone and their findspots.</i>	338

4.76.	<i>Joining pieces of coloured limestone and their findspots.</i>	339
4.77.	<i>Joining or related pieces of talc and chlorite schist and their findspots.</i>	340
4.78.	<i>Precision statistics for 21 rim fragments.</i>	342

Chapter 5

5.1.	<i>Results of the in situ optical examination for all the figurines.</i>	382–94
5.2.	<i>Results of analysis for the Keros figurines.</i>	401–2
5.3.	<i>Final provenance assignment of the analysed Keros figurines.</i>	407–9
5.4.	<i>Results of analysis for the Keros vessels.</i>	423–4
5.5.	<i>Final provenance assignment of the analysed Keros vessels.</i>	426–7

Chapter 7

7.1.	<i>Comparison between the Special Deposit South, Dhaskalio and Kavos 1987.</i>	446
7.2.	<i>List of trenches and phases sampled for petrographic analysis.</i>	448
7.3.	<i>Summary of samples by petrographic fabric.</i>	450
7.4.	<i>Correlation of chemical, petrographic and macroscopic samples analysed.</i>	458–9
7.5.	<i>Summary of petrographic samples by site and phase.</i>	461
7.6.	<i>Summary of shape frequency by petrographic fabric.</i>	462–3
7.7.	<i>Summary of petrographic fabrics with the greatest identified range of vessel function.</i>	465
7.8.	<i>High biotite, fossil-bearing, granitic-derived.</i>	465
7.9.	<i>Coarse, granitic-derived, macrofossils, calcareous-rich clays, possible mixing.</i>	466
7.10.	<i>Granitic sand temper, with clay mixing?</i>	466
7.11.	<i>Sandstone-rich.</i>	467
7.12.	<i>Sand-tempered metamorphic quartz and calcareous-rich inclusions.</i>	467
7.13.	<i>Coarse meta-granite inclusions with dense biotite-rich fine fraction and varied accessory minerals.</i>	468
7.14.	<i>Non-fossiliferous, non-calcareous, granitic-derived inclusions.</i>	469
7.15.	<i>Granite and flysch-derived sand-tempered inclusions.</i>	470
7.16.	<i>Very coarse granitic-derived sand with organic-temper.</i>	471
7.17.	<i>Calcareous sediment.</i>	471
7.18.	<i>Non-calcareous, quartz-feldspar inclusions, biotite-rich fine fraction with accessory green amphibole, clinozoisite and garnet.</i>	472
7.19.	<i>Calcareous-rich (micrite, filaments and microfossils), granitic-derived with fine fraction mica.</i>	472
7.20.	<i>Granitic-derived fabric with silty clay inclusions, biotite-rich and micrite-bearing fine fraction.</i>	473
7.21.	<i>Non-calcareous, muscovite-rich, quartz-feldspar inclusions with accessory green amphibole.</i>	473
7.22.	<i>Non-calcareous, densely packed quartz-feldspar and chert with accessory green amphibole and biotite.</i>	474
7.23.	<i>Micaceous schist with glaucophane, garnet and variable micrite inclusions.</i>	474–5
7.24.	<i>Quartz-feldspar-mica schist with common iron oxides.</i>	475
7.25.	<i>Semi-coarse fabric with quartz-feldspar-mica-epidote-clinozoisite schist and shell filaments.</i>	476
7.26.	<i>Quartz-feldspar-clinopyroxene-green amphibole schist with severely altered feldspars.</i>	476
7.27.	<i>Quartz-garnet phyllite.</i>	477
7.28.	<i>Biotite phyllite.</i>	477
7.29.	<i>Chlorite schist.</i>	478
7.30.	<i>Calcareous clay with fossil-bearing calcareous rock fragments and volcanic inclusions: minor phyllite and wackestone.</i>	478
7.31.	<i>Calcareous clay with volcanic rock inclusions and micrite (fossiliferous?)</i>	480
7.32.	<i>Non-calcareous clay with volcanic rock inclusions and common fine fraction mica: sand tempered?</i>	480
7.33.	<i>Non-calcareous clay with volcanic rock sand temper.</i>	481
7.34.	<i>Non-calcareous clay with volcanic rock inclusions and common fine fraction mica: sand tempered?</i>	482
7.35.	<i>Calcareous clay with fossil-bearing calcareous rock fragments, devitrified volcanic glass and fine-grained volcanic inclusions.</i>	482
7.36.	<i>Non-calcareous clay with volcanic rock and biotite-rich phyllite inclusions.</i>	483
7.37.	<i>Non-calcareous clay with andesitic volcanic rock inclusions.</i>	484
7.38.	<i>Very fine, plagioclase feldspar, biotite-rich.</i>	484
7.39.	<i>Red oxidized lava, microlitic volcanic rock.</i>	484

7.40.	<i>Volcanic rock sand-tempered, muscovite-rich.</i>	485
7.41.	<i>Dark phyllite with sparite/micrite (non-biogenic) and quartzite.</i>	485
7.42.	<i>Red phyllite (crenulated).</i>	486
7.43.	<i>Red/dark brown phyllite with calcite.</i>	486
7.44.	<i>Talc.</i>	487
7.45.	<i>Crushed calcite, micrite sand and dark phyllite.</i>	487
7.46.	<i>Crushed calcite, no micrite, quartz-series rock fragments.</i>	488
7.47.	<i>Crushed calcite, quartz and mica (variable).</i>	488
7.48.	<i>Loners.</i>	489
7.49.	<i>Calcareous fossiliferous.</i>	489
7.50.	<i>Pale fabric with calcareous haloes.</i>	489
7.51.	<i>Micrite, non-biogenic.</i>	490
7.52.	<i>Grey fabric with occasional quartz and iron oxide in FF.</i>	490
7.53.	<i>Highly OA, polycrystalline quartz and muscovite rich.</i>	491
7.54.	<i>Fine clay with high percentage of biotite in FF.</i>	491
7.55.	<i>Micaceous fabric with amphiboles and clinozoisite.</i>	492
7.56.	<i>Fine, iron-rich fabric.</i>	492
7.57.	<i>Fine with calcite and micrite.</i>	492
7.58.	<i>Chemical groups A, B, C, D, E and F: average concentrations and standard deviations considering a best relative fit.</i>	497
7.59.	<i>Chemical groups G, H, I and J: average concentrations and standard deviations considering a best relative fit.</i>	498

Chapter 8

8.1.	<i>Analyses of Certified Reference Materials on the SEM-EDS and microprobe.</i>	504
8.2.	<i>Bulk analyses for Kavos Promontory slags using SEM-EDS.</i>	505
8.3.	<i>SEM-EDS analyses on prills in samples KN65, K7P32, and MKN7.</i>	507
8.4.	<i>SEM-EDS analyses of ceramic and slag areas in metallurgical ceramics from Kavos Promontory.</i>	510
8.5.	<i>Lead isotope analysis results from metals and metallurgical remains from Dhaskalio and Kavos.</i>	513
8.6.	<i>SEM-EDS and microprobe analysis of copper-based artefacts from Dhaskalio.</i>	516
8.7.	<i>Bulk compositions of slags, metallurgical ceramics, and litharge from Dhaskalio.</i>	517
8.8.	<i>Analyses (SEM-EDS) of metallic phases found in slags from Dhaskalio.</i>	517
8.9.	<i>Qualitative data from portable XRF analyses on copper-based artefacts from Dhaskalio.</i>	520
8.10.	<i>Bulk and phases analyses of speiss sample 11541 taken in SEM-EDS.</i>	522

Chapter 9

9.1.	<i>Quantitative comparison of various find types at Dhaskalio and in the Special Deposit South.</i>	545
------	---	-----

Chapter 10

10.1.	<i>Phases, culture groups and calendar dates at Dhaskalio.</i>	549
-------	--	-----

Abbreviations

cm	centimetre
D.	diameter
g	gram
H.	height
km	kilometre
L.	length
m	metre
mm	millimetre
PPL	plain polarized light
SEM-EDS	Scanning Electron Microscopy with Energy Dispersive Spectroscopy
SEM-BSE	Scanning Electron Microscopy with Back Scattered Electron imaging
SF	special find
T.	thickness
W.	width
Wt	weight
XPL	cross polarized light

Unless otherwise stated, the scale for finds is in centimetres.

Preface

Colin Renfrew & Michael J. Boyd

The status of Kavos on Keros as the earliest maritime sanctuary in the world is documented by the present volume, which includes (in Part A) the full publication of the marble finds from the Special Deposit South at Keros. These constitute the largest assemblage of Early Cycladic sculptures and vessels ever recovered in a controlled excavation, although they were all found in fragmentary condition. They add significantly to the already substantial corpus of finds from well-documented contexts in the Cycladic islands. They open new possibilities for the study of the production and the use of the rich repertoire of Cycladic artefacts of marble and thus to the understanding of ritual practice in Early Cycladic societies. The marble sculptures from the looted Special Deposit North at Kavos that have been recovered in systematic excavations will be discussed in Volume VII.

Also included here (in Part B) are chapters offering our concluding assessment of the roles of the settlement on Dhaskalio and of the two Special Deposits at Kavos. The publication *The Settlement at Dhaskalio* constitutes Volume I of the present series, while Kavos and the Special Deposits forms Volume II. The Pottery from Dhaskalio and *The Pottery from Kavos*, Volumes IV and V respectively, both by Peggy Sotirakopoulou, will complete the publication of the 2006 to 2008 excavations of the Cambridge Keros Project.

The existing and projected volumes of the Cambridge Keros Project are as follows:

Volume I: *The Settlement at Dhaskalio* (2013, edited by C. Renfrew, O. Philaniotou, N. Brodie, G. Gavalas & M.J. Boyd).

Volume II: *Kavos and the Special Deposits* (2015, edited by C. Renfrew, O. Philaniotou, N. Brodie, G. Gavalas & M.J. Boyd).

Volume III: *The Marble Finds from Kavos and the Archaeology of Ritual* (2018, edited by C. Renfrew, O. Philaniotou, N. Brodie, G. Gavalas & M.J. Boyd).

Volume IV: *The Pottery from Dhaskalio* (2016, by P. Sotirakopoulou).

Volume V: *The Pottery from Kavos* (in preparation, by P. Sotirakopoulou).

Volume VI: *The Keros Island Survey* (in preparation, edited by C. Renfrew, M. Marthari, A. Del-

laporta, M.J. Boyd, N. Brodie, G. Gavalas, J. Hilditch & J. Wright).

Volume VII: *Monumentality, Diversity and Fragmentation in Early Cycladic Sculpture*: the finds from the Special Deposit North at Kavos on Keros (in preparation, by C. Renfrew, P. Sotirakopoulou & M.J. Boyd).

Here we present first the marble sculptures and vessels recovered from the Special Deposit South, which are fully described and illustrated in the chapters which follow. Their contexts are given in detail in Volume II where each is listed in the detailed tables accompanying chapter 4 of that volume. There the tables are organised by trench and then by layer number, each sculptural or vessel fragment being listed by its special find number, which is unique to the excavation. The other finds from the Special Deposit South are all dealt with in detail in that volume, with the exception of the pottery, whose publication will form Volume V. The weathering of the marble finds is discussed by Maniatis & Tambakopoulos in chapter 11 of Volume II. Various features of the contexts of the finds are analysed by Michael Boyd in chapter 12 of Volume II. The potential joins noted among the sculptures recovered from the Special Deposit South are discussed in appendix 13B of Volume II and those among the marble vessels in appendix 13A (see further Chapter 4 in this volume). The lack of joins observed between finds from the Special Deposit North and the Special Deposit South is noted there. The characterisation of the marble used to produce the sculptures and vessels from the Special Deposit South is discussed in Chapter 5 of the present volume.

The finds, among the various categories, from the settlement at Dhaskalio and from the two Special Deposits at Kavos are then compared and contrasted in Part B. This allows the differing functions of the settlement and of the Special Deposits to be brought into focus, and the intensity of their use during the different phases of activity in the early bronze age to be considered further. An attempt is then made, in Chapter 10, to set the ritual functions of the sanctuary on Keros into the wider context of early ritual practice in the Aegean and beyond.

Acknowledgements

The editors again wish to thank the many organisations and people who have offered help and support to the Cambridge Keros Project. The project has been based at the McDonald Institute for Archaeological Research at the University of Cambridge (Directors: Professor Graeme Barker and lately Professor Cyprian Broodbank) and supported by the British School at Athens (Directors: Dr James Whitley, followed by Professor Catherine Morgan and now Professor John Bennet) and our first debt is to them and to their management committees. It has been conducted with the permission of the Archaeological Service of the Hellenic Ministry of Culture and Sport, with the personal support of Dr Marisa Marthari, formerly Director of the then 21st Ephorate of Prehistoric and Classical Antiquities, now Honorary Ephor, and lately with the support of Dr Dimitris Athanasoulis, Director of the Cycladic Ephoreia.

The project was initiated with support from the Balzan Foundation and has been consistently supported with a series of grants from INSTAP (the Institute for Aegean Prehistory). The participation of Dr Michael Boyd was made possible by a generous grant from the Stavros S. Niarchos Foundation (in memory of Mary A. Dracopoulos); the Niarchos Foundation made subsequent grants in support of publication. Further financial support has come from the British Academy, the A. G. Leventis Foundation, the Leverhulme Trust, the Society of Antiquaries of London, the Research Fund of the McDonald Institute and the British School at Athens. The participation of Dr Sotirakopoulou in the post-excavation work in 2009 was supported by the N.P. Goulandris Foundation.

The staff of the British School at Athens has been particularly helpful in many practical matters. Helen Clark, and later Tania Gerousi, Secretary and Administrator respectively, gave their detailed attention to the many permit applications that a large project entails, with the support of the assistant director, Robert Pitt, and lately Dr Chryssanthi Papadopoulou. Maria Papaconstantinou was invaluable through her advice and practical support on financial matters. The staff of

the Library, Penny Wilson and Sandra Pepelasis, have supported our researches, and we are particularly grateful to the archivist, Amalia Kakissis, for all her help. Much of the scientific work of the project was carried out by members of the Fitch Laboratory, and we are grateful to its director, Dr Evangelia Kyriatzi, for supporting this.

The project is grateful to Christos Doumas, Photeini Zappeiropoulou, and Lila Marangou for their warm support for the enterprise. In particular Christos Doumas and Photeini Zappeiropoulou encouraged us to examine material from their prior excavations in order to consider the possibility of joining material between the Special Deposits North and South.

The excavation personnel in the 2006 to 2008 excavation seasons were thanked by name in the acknowledgements of Volumes I and II and we are grateful for their participation. We are grateful also for the continuing support of our co-workers on Ano Kouphonisi, where we were based for the excavation seasons of 2006-2008 and the study season of 2009.

The study of the figurines and marble vessels was carried out in the Naxos Museum, as was the sampling for the marble study. We are grateful to the Museum, its director, Irini Legaki, and its staff, especially Daphne Lalayannis, Ilias Probonas and Vasiliki Chamilothoni.

The drawings of finds have been contributed by Jenny Doole and Tassos Papadogonas.

Photographs of finds and many of the site photographs are by Michael Boyd, with other site photographs (and some finds) by Thomas Loughlin and by other members of the excavation team. We are grateful to Vicki Herring for undertaking final work on the figures during the production process, and to Anne Chippindale, for her work on the text, and for seeing the volume through the press, and to Jenny Doole for compiling the index.

The publication costs have been generously met by the Stavros S. Niarchos Foundation, the McDonald Institute, the A. G. Leventis Foundation and the Institute for Aegean Prehistory.

Part B
Dhaskalio and Kavos in Perspective

Chapter 6

The Pottery from Dhaskalio, the Special Deposit South and the Special Deposit North Compared

Peggy Sotirakopoulou

The comparisons between the pottery from the three areas of the site at Dhaskalio Kavos following below are based on the publication of the pottery from the 2006–08 excavations at Dhaskalio (Volume IV), the preliminary observations on the pottery from the excavations in the same years at the Kavos Special Deposit South (Renfrew *et al.* 2007b, 114–19; Volume I, 74–5; Volume II, appendix) and the publications of the pottery from the looted Special Deposit North (Broodbank 2007; Doumas 2007b; Sotirakopoulou 2004; 2008). The topographical relationship between Dhaskalio and Kavos (Fig. 6.1) was fully discussed in Volume I, where the disposition of the trenches on Dhaskalio and the conduct of the excavation is fully discussed (see Volume I, chapter 6 & fig. 6.3). The excavations in the Special Deposit South are described in chapter 4 of Volume II, and the location of the excavation trenches of the Special Deposit South are seen in Figure 6.1 and Figure 1.1 of the present volume. The locations of the excavation trenches on Dhaskalio are shown in Figure 6.2.

The pottery from Dhaskalio

The Dhaskalio ceramic assemblage constitutes a large body of material consisting of 39,717 fragments. Several of these join (old breakages) or belong together, thus forming in certain instances a substantial part of a vase and, in rare cases, even whole vases.

This pottery is almost exclusively of early bronze age date, the only exceptions so far being 38 sherds of Late Antiquity recovered mostly from the area of the Early Byzantine chapel, and a Late Cycladic sherd from the surface survey at the north slope of the islet. On the basis of stratigraphic observations, specific pottery shapes and pottery joins between layers, we were able to recognize three phases of occupation at Dhaskalio—Phase A, Phase B and Phase C—spanning the Early Cycladic II and Early Cycladic III periods (Renfrew *et al.* 2009, 31–7; Volume I, 72–4): Phase A

corresponds to earlier Early Cycladic II or Keros-Syros culture; Phase B corresponds to late Early Cycladic II and the earlier phase of what is known as the ‘Kastri group’; and Phase C corresponds to Early Cycladic III and the later and main phase of the Kastri group. A point worthy of particular mention is the considerable ceramic continuity in shapes, fabrics and modes of surface treatment and decoration between Phases A, B and C, which is in accordance with the evidence from other well-stratified Early Cycladic sites, notably Aghia Irini on Kea (Wilson 1999, 20, 90, 229, tables 3.1 & 3.2), Markiani on Amorgos (Birtacha 2006, 138; Eskitzioglou 2006, 139, 156–7; Renfrew 2006, 97, table 7.1) and Phylakopi on Melos (Renfrew & Evans 2007, 155, 176).

The diagnostic pottery from all three phases of occupation at Dhaskalio is dominated by coarse household wares (N.B. the term *diagnostic*, as used here, includes the sherds indicative of shape or dating and feature body sherds). Specifically, in Phase A, it is the food-processing and heating equipment, including baking pans or hearths (c. 36 per cent) and to a much lesser degree cooking pots (c. 13 per cent), that is predominant. The jars serving for storage or transportation of dry agricultural produce or as containers of liquids appear to be as frequent as the cooking pots, while the shapes associated with serving and consumption, such as bowls, basins and jugs, and other forms of uncertain function, such as the so-called braziers-‘masks’ and the plain conical-necked jars, are very modestly represented or are rare. On the contrary, in Phase B, it is the storage or transport jars that predominate by far over the other shapes, amounting to c. 47 per cent of the diagnostic sherds and c. 34 per cent of the individual vases identified. The baking pans or hearths (10–15 per cent) are now almost as frequent as the bowls (10–13 per cent) and the cooking pots (4–6 per cent) are markedly reduced, while the basins, jugs, cups, braziers-‘masks’, plain conical-necked jars and pyxides occur again in small quantities or are



Figure 6.1. Plan of Dhaskalio and Kavos, showing the location of excavation trenches.

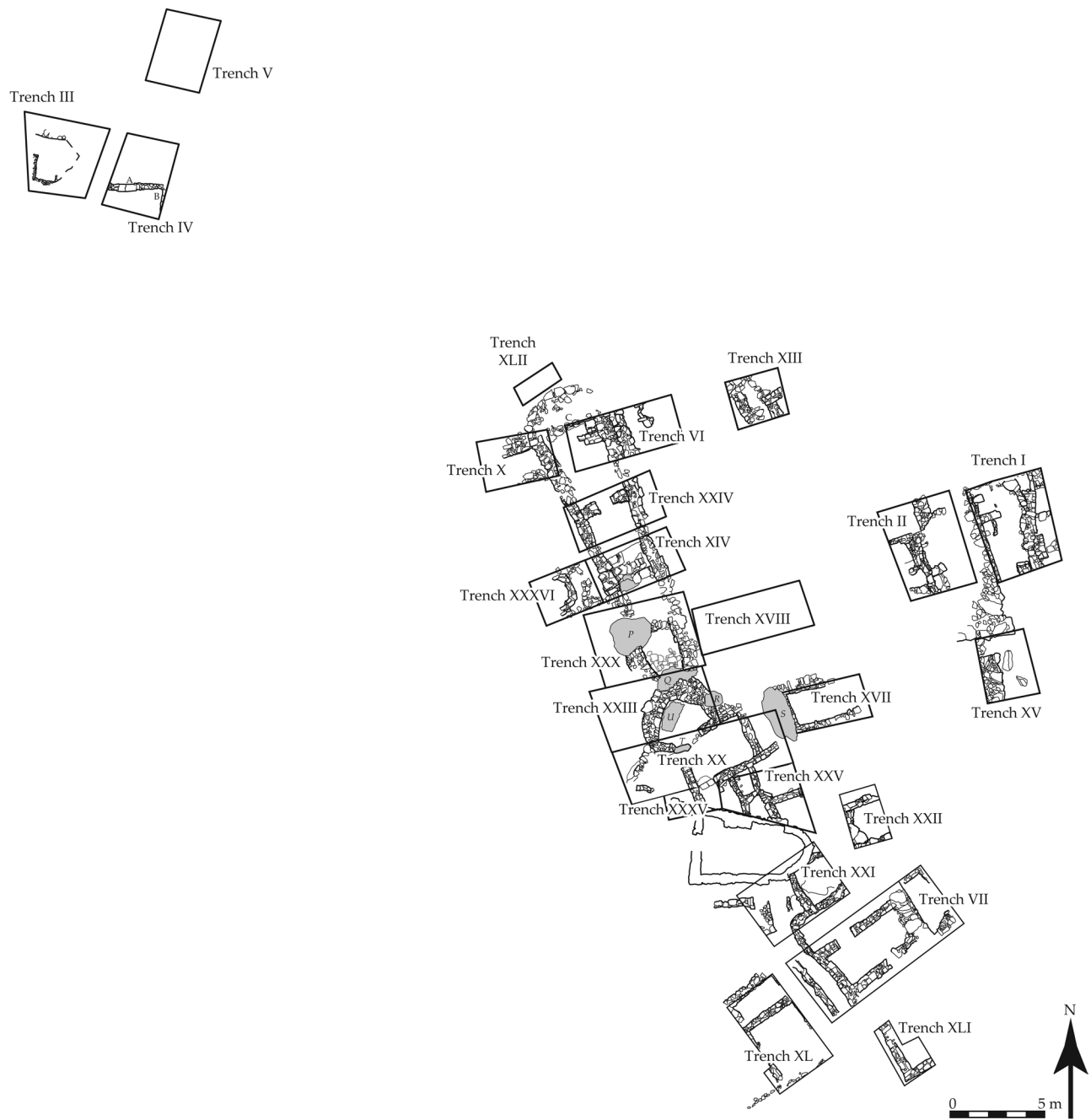


Figure 6.2. *Overall plan of the Dhaskalio trenches at the end of excavation.*

rare. The predominance of the storage or transport jars over the other shapes becomes much more striking in Phase C of the settlement, when these vessels amount to *c.* 65 per cent of the diagnostic sherds and *c.* 57 per cent of the individual vases identified, while all the other forms become even rarer than in Phase B and taken together hardly exceed one-fifth of the diagnostic sherds and one quarter of the individual vases identified.

The Dhaskalio pottery is also characterized by the scarcity or even total absence of forms that are plentiful or occur in some quantities in the opposite Special Deposit South and Special Deposit North at Kavos and are also present at other early bronze age settlement sites of the Cyclades or even mainland Greece. Thus, the sauceboats and the pedestalled conical-necked jars with incised decoration are not only very modestly represented or rare in all three

phases of the settlement, but also have a dramatic decrease in relative frequency from one phase to the other. The mat or leaf impressions on the bases of pots are also rare and the painted dark-on-light wares of Early Cycladic II type, including sauceboats, jugs and pyxides, are even scantier, while forms such as the conical-necked jars and lentoid pyxides with stamped-and-incised decoration of *Kerbschnitt* and spirals or concentric circles, conical-necked jars with painted dark-on-light decoration, spool-shaped pyxides, multiple-headed lamps, one-handled pedestalled cups with painted dark-on-light decoration, animal protomes from sauceboat spouts and theriomorphic vases are totally lacking.

On the other hand, Dhaskalio has produced a considerable number of vases with typological features and elements of surface treatment or decoration that are rare or unknown as yet in the early bronze age ceramic repertoire of the Cyclades or even the Aegean. Thus, the light-faced concave- or cylindrical-necked jar with vertical ribbed decoration, which is the hallmark of the Dhaskalio Phase C pottery, is only rarely found at other Early Cycladic sites, while the bichrome or polychrome (including mottled) slipped surface treatment on vases of all three phases (though mainly of Phase C) of the settlement can only find its nearest parallels in the surface treatment of the sauceboats from the Special Deposits North and South at Kavos. There is also a group of about 20 vases from all three phases of Dhaskalio, but mainly from Phase C, which are new in the early bronze age ceramic repertoire of the Cyclades or the Aegean. Characteristic examples of these are a one-handled short-necked cup with grooved decoration (C2285), a small jug with decoration of horizontal grooves all over the neck and body (C2286), a lentoid pyxis with decoration of rope arcs (C2079) and a bird-shaped askos with incised decoration of parallel diagonals (C2353), all from Phase C levels of the site.

A salient feature of the Dhaskalio pottery is that the overwhelming majority or even the entire body of it seems to have been imported from other Cycladic islands, both neighbouring (such as Naxos, Amorgos, Ios and the smaller islands between) and more remote ones (such as Siphnos, Thera and Melos), or even from islands of the Saronic Gulf, such as Poros and Aegina (Volume I, chapter 23).

As for the pottery defining the chronological distinction between the three phases of the settlement, it is worth noting that the Kastri group pottery from Phases B and C, though comprising almost the entire range of its characteristic forms (namely the shallow bowl, the one-handled tankard, the one-handled short-necked cup, the depas amphikypellon,

the beaked jug with a long cutaway spout, the steep-necked jug with a cutaway spout, the lentoid pyxis with incised-and pointillé decoration, the side-spouted pyxis or teapot and the dark-faced jar or jug with vertical ribbed decoration), except for the bell-shaped cup and the wheel-fashioned plate, forms a very small part of the Dhaskalio ceramic assemblage, amounting to 7.64 per cent of the diagnostic (but only 0.97 per cent of the total) Phase B sherds, and to 5.57 per cent of the diagnostic (but only 2.12 per cent of the total) Phase C sherds. On the other hand, the Phase C pottery with typological features and elements of surface treatment and decorative scheme occurring in Phylakopi I-ii/iii or even early Middle Cycladic contexts and, therefore, dated to the Early Cycladic III period, forms a significantly larger part, amounting to 19.52 per cent of the diagnostic sherds and 7.45 per cent of the total Phase C ceramic assemblage. This pottery includes the following: light-faced handleless cups of pale fabrics with or without studs below the rim; light-faced concave- or cylindrical-necked jars with vertical ribbed decoration and their whitish slipped and red painted variants; red slipped and burnished jars with either a tall or a short collar neck and a lacquered appearance; barrel jars having either a groove round the inner lip or horizontal crescent-shaped handles slightly convex in cross-section, or painted dark-on-light decoration of cross-hatched panels; a beaked jug with a backward tilting neck; two possible duck vase fragments; a closed vessel with painted black-on-red decoration; two dark slipped closed vessels with painted white-on-red or white-on-black decoration; light-faced bowls and basins of pale fabrics; and red slipped bowls, basins and non-identifiable open or closed shapes which are either of pale fabrics or of a brown fabric with a grey-black core. The spectacular increase of the pale clays and pale surfaces—predominantly associated with the Early Cycladic III forms—in Dhaskalio Phase C is also indicative of the Early Cycladic III horizon, as this situation echoes that of Phylakopi phase B on Melos, considered to be equivalent to Phylakopi I-iii (Renfrew & Evans 2007).

The pottery from the Special Deposit South at Kavos

The pottery from the Special Deposit South at Kavos constitutes a larger body of material than that of Dhaskalio, consisting of about 54,000 potsherds. These, however, are as a rule very small and fragmentary, so that, in spite of the fact that they were found to join (old breakages) or belong together in about 300 instances, very rarely do they form a considerable part of a vase and in only two instances (i.e. the pyxis C0467

and the miniature cup C0469) a nearly complete vase. Their preservation is generally poor, their surfaces being often very weathered, so that in many cases the painted decoration has flaked off and the incised or impressed decoration is barely visible.

As at Dhaskalio, the Special Deposit South ceramic assemblage is almost exclusively of early bronze age date, the only exceptions being 13 sherds of historical times (Volume II, chapter 10A; a further 43 sherds were subsequently recognized as possibly of historical date). However, the distinction between the different phases of activity at the Special Deposit South was not as clear as at Dhaskalio on account of the disturbed and complicated stratigraphy resulting from successive episodes of deposition, some of them following the opening of small pits (Volume II, chapter 5). The disturbance of the stratigraphy is further confirmed by the fact that the joining or belonging together potsherds have come not only from various layers of the same trench, but also from different and not always adjacent trenches (Volume II, appendix). Therefore, the phasing of the pottery from the Special Deposit South was based not on the stratigraphic sequence, but on its similarities with the material from the opposite and well-stratified settlement at Dhaskalio. These similarities show the Special Deposit South to have covered essentially the same timespan as Dhaskalio, from an early phase of Early Cycladic II to the end of the early bronze age.

The diagnostic pottery from the Special Deposit South, though largely comprising shapes and types similar to those from Dhaskalio, consists of forms elsewhere seen in both domestic and funerary contexts, followed by forms elsewhere mainly of funerary use; strictly domestic ware occurs in very small quantities. Thus, in sharp contrast with Dhaskalio, the shape predominating by far over the others is the sauceboat with a variety of modes of surface treatment, amounting to about 41 per cent of the diagnostic sherds. Then comes the conical necked jar, mostly with incised and much more rarely with either stamped-and-incised or painted dark-on-light decoration, or with no decoration, which amounts to about 25 per cent of the diagnostic pottery. The fragments of these two shapes together may range from 30 to 83 per cent of the diagnostic and from 10 to 23 per cent of the total of sherds from each trench. Far behind the two most common shapes and in diminishing order of frequency follow the storage jars of various types, amounting to c. 5 per cent of the diagnostic potsherds, while the jugs (c. 3.5 per cent) and bowls (c. 3 per cent) occur in even smaller quantities. Other identifiable shapes, such as pyxides (including both the lentoid and the rare spool-shaped type), cups (including one-

handled pedestalled cups, one-handled tankards, a miniature cup and possible depa fragments), baking pans or hearths, basins and braziers-‘masks’, are also present, though in quantities amounting to less than 1 per cent of the diagnostic pottery. The number of 243 fragments of multiple-headed lamps and possible multiple-headed lamps, though representing only about 2 per cent of the diagnostic sherds, is amazing in view of the extreme rarity of the type in the Cyclades beyond the two Special Deposits at Kavos and its total absence from Dhaskalio. Equally amazing is the number of at least 13 (Volume II, chapter 10D) and perhaps as many as 20 animal protomes in the form of a ram or bull from sauceboat spouts—including a few probably belonging to theriomorphic vases—which are so far unknown from elsewhere in the islands apart from the Special Deposits North and South at Kavos, and are elsewhere known only from a total of seven examples from Tiryns and Zygouries in the northeast Peloponnese, and three from elsewhere in the Peloponnese. The 110 specimens of mat, leaf and cloth impressions on the bases of pots (Volume II, chapter 10B) are also worthy of particular mention, since, though rare in relative frequency (c. 0.9 per cent), they are many more than the total of 24 examples of mat and leaf impressions from all three phases of Dhaskalio (Volume I, chapter 31A; Volume IV, chapter 2, A-5 & A-16, chapter 3, B-24, chapter 4, C-37 & C-38). The painted dark-on-light wares of Early Cycladic II type, including mostly sauceboats and to a lesser degree jugs, pyxides, one-handled pedestalled cups and kylikes, are also much better represented and employ a much richer repertoire of motifs in the Special Deposit South than at Dhaskalio.

Moreover, the Kastri group forms not only occur in much smaller quantities (0.65 per cent of the diagnostic sherds), but also include a more limited range of shapes than at Dhaskalio, namely the one-handled tankard, the incised pyxis, the dark-faced jar or jug with vertical ribbed decoration, the black or brown-black slipped and burnished jug with a leaf-shaped mouth, the shallow bowl and possibly the depas. As for the potsherds showing typological features and elements of surface treatment and decoration indicative of the Early Cycladic III period, these are of an even more limited range and occurrence, amounting to only 0.17 per cent of the diagnostic pottery, while those having exact counterparts in Dhaskalio Phase C are very few. This pottery includes a light-faced handleless cup of pale fabric with a stud below the rim, 16 sherds of pale fabrics with matt painted dark-on-light decoration, two sherds with painted white-on-black decoration and a fragmentary zoomorphic vessel of Phylakopi I type.

On the other hand, a significant similarity between the pottery from the Special Deposit South and that from Dhaskalio is that the overwhelming majority or even the entire body of it is attributed a provenance on other Cycladic islands or even mainland Greece (Volume II, chapter 6).

The pottery from the Special Deposit North at Kavos

The pottery from the looted Special Deposit North at Kavos is another important body of material, of which some 15,600 fragments have been studied so far. The exact number of potsherds collected during the various seasons of official archaeological work at the spot is not known as yet, but may be not as large as that from the undisturbed Special Deposit South, as a part of the original assemblage is likely to have been lost due to the intensive looting of the area. So, until the detailed study of the material is finished, the quantities mentioned below should be considered preliminary and subject to alteration, although, given the many similarities between this assemblage and that of the Special Deposit South, the final percentage rates are not expected to show any significant change in the order of shapes according to frequency.

As in the Special Deposit South, the pottery from the Special Deposit North consists of fragments which, though joining (old breakages) in a number of cases, can rarely form a substantial part of a vase and in only three instances a complete small vase, although there are also four small vases that were found intact. Two of the complete vases, that is, a one-handled red slipped bowl and a dark-brown glazed skyphos, date from the Late Classical or Early Hellenistic period, whereas the rest, namely two aryballoi, two pyxides and a miniature funnel-necked jar (Sotirakopoulou 2004, pls. 9b, 12:a–b, 14b; 2008, fig. 13.1:a–d), are all of early bronze age date. However, the potsherds from the Special Deposit North are in a much better condition than those recovered from the Special Deposit South: they are often larger and less weathered and abraded, so that their surface treatment and decoration are, as a rule, much better preserved.

Here again, it was not possible to distinguish between the different phases of activity because of the disturbed stratigraphy, a situation initially thought to have been caused by the looters, but now thought likely also to have been occasioned by the formation of the Special Deposit North in the same way as the Special Deposit South was formed. Therefore, the phasing of the pottery from the Special Deposit North can only be based on its similarities with the material both from the settlement at Dhaskalio and from the

Special Deposit South. These similarities show the Special Deposit North to have been contemporary with Dhaskalio and the Special Deposit South for the most part, that is, to have been in use during earlier Early Cycladic II and to have continued into the time of the Kastri group through to the end of the early bronze age. However, a few characteristic Kampos group forms, namely a biconical pyxis with a red Urfinis slip and two or three incised aryballoi (Sotirakopoulou 2004, 1319, 1323, pls. 12a, 14b; 2008, fig. 13.1:a–b), place the beginning of activity in the Special Deposit North somewhat earlier than in the two other areas of the site, that is, in the transitional Early Cycladic I–II phase.

The ceramic forms from the Special Deposit North are essentially the same—with only few exceptions—and occur in the same order according to frequency as those from the Special Deposit South. Here again, the most commonly encountered shape, far outnumbering the others, is the sauceboat, representing 27.26 per cent of the diagnostic sherds studied so far. However, the sauceboats from this deposit exhibit an even greater diversity of modes of surface treatment than the ones from the Special Deposit South—a fact probably owing to a large extent to the better state of preservation of the Special Deposit North assemblage—and together with those represent the two largest and most diverse accumulations of such vessels known anywhere in the Cyclades and the Aegean. Second in order of frequency is again the conical-necked jar, mostly with incised and much more rarely with either stamped-and-incised or painted dark-on-light decoration, or with no decoration, which amounts to 23.51 per cent of the diagnostic sherds. The storage jars (8.37 per cent), jugs (5.46 per cent), bowls (2.16 per cent) and pyxides (1.25 per cent), though occurring in a variety of forms, are far less frequent. Other identifiable shapes, such as cups (including one-handled pedestalled cups, one-handled tankards and possibly the bell-shaped cup and the depas cup), baking pans or hearths and basins, range from scarce to extremely rare, amounting each to less than 1 per cent of the diagnostic pottery. The numbers of multiple-headed lamps (36) and animal protomes from sauceboat spouts (12) identified so far, though smaller than those of their counterparts in the Special Deposit South, are still impressive, given the extreme rarity or total absence of such vases from elsewhere in the Cyclades. Regarding the sauceboats with animal protomes in particular, the total of about 30 examples from the Special Deposits North and South at Kavos, as opposed to the mere seven examples of such vases from Tiryns and Zygouries, raises the question of whether the source of these sauceboats should rather be sought somewhere

in the Cyclades than in the northeast Peloponnese, as is suggested by Broodbank (2007, 149). The mat impressions on the bases of pots are also less well represented than in the Special Deposit South, with about 15 known examples, while only one leaf impression has been recorded so far. The painted dark-on-light wares of Early Cycladic II type, which, as in the Special Deposit South, include mostly sauceboats and to a lesser degree jugs, pyxides and the rare one-handled pedestalled cups, are not only better represented in the Special Deposit North, but also employ a richer repertoire of motifs than the similar wares from the Special Deposit South, a fact presumably also owing to a large extent to the much better condition of the Special Deposit North assemblage. Shapes such as duck vases and aryballoi, which are not present in the Special Deposit South, are very rare, numbering five and three examples respectively. There are also three fragments of theriomorphic vessels.

The Kastri group pottery occurs again in very small quantities, not exceeding 0.5 per cent of the diagnostic sherds examined, and includes more or less the same range of shapes as that from the Special Deposit South (i.e. one-handled tankards, incised pyxides, jar or jug fragments with vertical ribbed decoration and possible depas fragments), perhaps with the addition of the bell-shaped cup and the high-necked beaked jug of Anatolian type. Sherds of Early Cycladic III date are even fewer, including the five duck vase fragments mentioned above and isolated jug fragments with painted dark-on-light decoration of horizontal bands similar to that of the Phylakopi I jugs.

As in the cases of the Special Deposit South and of Dhaskalio, the overwhelming majority or even the entire body of the pottery from the Special Deposit North is attributed a provenance on other Cycladic islands or even mainland Greece (Broodbank 2007; Hilditch 2007).

Discussion

The individualities of the pottery from each one of the three separate areas of the site at Dhaskalio Kavos outlined above and the sharp differences between them in the range and relative frequency of ceramic shapes are thought to be directly related to the function of each area.

With regard to the ceramic assemblages from the Special Deposits North and South at Kavos, the many similarities between them indicate that the two deposits were of the same nature and more or less had the same function. Specifically, the presence in them of large quantities of shapes and types of ritual or symbolic character—though, strikingly, not of a single

sherd of a frying pan so far—as opposed to the limited occurrence of household wares, taken into account with the unprecedented wealth of marble vases and figurines, the highly fragmented condition of virtually all the finds, the limited number of joins recovered among the artefacts and the attribution of their provenance to various Cycladic islands other than Keros, corroborate the interpretation of Kavos as the place for two separate areas of ritual deposition of deliberately smashed objects brought to the site by people from a number of other islands and perhaps the mainland of Greece, who visited the site, perhaps at fixed intervals, in order to participate in the rituals practised at the Special Deposits. Moreover, the fact that the fragments joining or belonging together rarely form a complete or nearly complete vase or figurine supports the view that the fragmentation process was generally not undertaken at Kavos itself, but must have taken place elsewhere, possibly in the various Cycladic islands from which the materials for deposition at Kavos were brought, and that the materials were brought to the site already in fragmentary condition. The site at Kavos is now claimed to be the first major symbolic centre of the early Aegean with a regional influence extending as far as the Greek mainland (Renfrew *et al.* 2007b; 2012; Volume II, chapters 5 & 13).

However, certain finds from the Special Deposit North indicate some differentiation between the two Special Deposits in ritual practice. Apart from the five complete clay vases of early bronze age date—two of which were restored from a number of joining sherds—the looted Special Deposit North has also yielded some complete marble vases restored from a number of joining fragments (Zapheirópoulou 1968a, 381, pls. 332β, 333:α–γ). These finds indicate that not all the artefacts brought for deposition to the Special Deposit North were fragmentary and that some of them were smashed *in situ*. Moreover, the traces of decayed bones noted in the Special Deposit North (Doumas 1964, 410; 2007a, 29) and the discovery of two built graves, perhaps of the Syros type, in the neighbouring area (Zapheirópoulou 1968a, 381, pl. 332δ; 2007a, 31, figs. 3.20–3.22; 2007b, 36) indicate that some burials may have taken place there. On the contrary, the Special Deposit South has produced two nearly complete clay vases restored from joining sherds, but no intact clay or stone vase nor any whole stone vase or marble figurine reconstructed from the fragmentary material recovered in it (Volume II, appendix 13A, appendix 13B). Neither has any human bone or tooth been found in it. Thus, the evidence from the Special Deposit South indicates that virtually all the artefacts deposited there had been brought in fragmentary condition and that the breakage had taken place elsewhere. The

only indications of burials near that area were the fragmentary human remains from the shallow caves or rock shelters in Area A, lying immediately south of the Special Deposit South (Volume II, chapter 17).

On the other hand, the ceramic assemblage from Dhaskalio, being of an overwhelmingly domestic character, indicates a settlement operating primarily as a place for periodic rather than permanent habitation. Specifically, the predominance of baking pans or hearths and to a lesser degree of cooking pots in Phase A indicates a settlement primarily orientated towards food-processing for immediate consumption, rather than towards transporting or storing up provisions for future use, whereas the predominance of storage jars in Phase B and particularly in Phase C points to a settlement concerned primarily with the bulk storage or transportation of foodstuffs and to a much lesser degree with food-processing, serving and consumption. The periodic occupation of the settlement is also implied by the small quantities of querns, grindstones, ground stone tools, spindle whorls, phytoliths and organic remains during all three phases of its occupation (Renfrew *et al.* 2009, 41–2; Volume I, chapter 34), as well as by the limited agricultural potential of Keros (Volume I, 403). These, taken into account with the conclusion that during the early bronze age the Dhaskalio islet was united with the opposite coast of Kavos by a causeway (Volume I, chapter 4), indicate that the function of the settlement at Dhaskalio was most probably connected with the activities at the Kavos Special Deposits. The implications of periodic occupation of Dhaskalio do not exclude the possibility of the presence at the site of a population of perhaps no more than 20 persons on a year-round basis, possibly increased occasionally by small groups of metalworkers who came to use the Kavos Promontory for the smelting of copper ore, but the settlement would only have been fully occupied when, perhaps at fixed intervals, it was visited by people from other islands flocking to participate in the rituals practised at the Special Deposits at Kavos (Volume I, chapter 34).

Such a function of the settlement explains well why ceramic forms of a primarily ritual character, such as sauceboats, pedestalled conical-necked jars with either incised or stamped-and-incised decoration, lentoid pyxides with either stamped-and-incised or painted dark-on-light decoration, etc., which are common in the Special Deposits North and South and are also present at other early bronze age settlement sites of the Cyclades and mainland Greece, are either scarce or totally lacking from Dhaskalio: such forms would be specially intended for the opposite Special Deposits at Kavos. The same explanation may be sug-

gested for the rarity of marble vessels and the total absence of marble figurines of the folded-arm type from Dhaskalio.

As noted above, the similarities of the pottery from the three areas showed the two Special Deposits at Kavos to have covered essentially the same timespan as Dhaskalio, from an early phase of Early Cycladic II to the end of the early bronze age, though with some variations in the beginning and intensity of activity in each one of them. The few vases and sherds of Hellenistic or Roman date from the Special Deposits and of Late Bronze Age or Early Byzantine date from Dhaskalio cannot in themselves establish any significant later activity in these areas. Specifically, the few characteristic Kampos group forms from the Special Deposit North suggest that activity started there somewhat earlier than in the two other areas of the site, that is, in the transitional Early Cycladic I–II phase, while the very small quantities and the limited range of characteristic Kastri group, and particularly of Early Cycladic III potsherds from the Special Deposits North and South in relation to those from Dhaskalio, indicate that in late Early Cycladic II and in the Early Cycladic III period the Special Deposits were declining in use, whereas the settlement at Dhaskalio continued to flourish. This, taken into account with the fact that the two predominant ceramic shapes of the Special Deposits, namely the sauceboat and the pedestalled conical-necked jar with incised decoration, though generally rare in all three phases of Dhaskalio, were shown to have a dramatic decrease in relative frequency in Phase B and a further noticeable decrease in Phase C of the settlement, corroborates the view that these are essentially shapes of earlier Early Cycladic II or the Keros-Syros culture which gradually die out after the end of this period and, consequently, that the Special Deposits North and South were most actively in use during the earlier Early Cycladic II period, equivalent to Dhaskalio Phase A. The fact that deposition in these two areas seems to have continued with increasingly diminishing intensity into the time of the Kastri group through to the end of the Early Cycladic III period may explain why forms typical of Dhaskalio Phase C, such as the light-faced concave- or cylindrical-necked jars with vertical ribbed decoration, are absent from the Special Deposits at Kavos.

The inferred gradual decline of the Special Deposits at Kavos during Phases B and C at Dhaskalio does not necessarily imply a change in the function of the site as ‘a symbolic attractor capable of inducing people to travel over considerable distances in order to participate in periodic public events’ (Renfrew 2007d, 439–40). Instead, it may imply a gradual change in the

character of these assemblies, in the sense that the site, though still operating in a ritual framework, may no longer have focused only on the structured deposition of formally smashed ‘choice’ materials at Kavos, but may increasingly have grown to be a centre of commercial activity. During Phase C in particular, which according to the excavation data seems to have been a period of *floruit* at Dhaskalio and of only limited use of the Special Deposits at Kavos, the site may mainly have operated as an important centre of commercial exchange and distribution of goods, quite like Delos in classical times (Renfrew 2007d, 440), and the age-long tradition of ritual deposition at Kavos may no longer have been the primary stimulus, but only the occasion for the periodic assemblies at Kavos and Dhaskalio. In this respect, the occurrence of two Early Helladic crinkle-rimmed tankards (C2358, C2360) in Dhaskalio Phase C is of particular importance, as these vessels denote the long-range external relations of the site.

The suggestion that Dhaskalio was at the centre of an exchange network with other islands and areas is corroborated by the fact that the various sorts of finds from the site, including building stone (Volume I, chapter 14), marble vases (Volume I, chapter 26), marble figurines (Volume I, chapter 24), stone discs (Volume I, chapter 30), obsidian (Volume I, chapter 28), metals (Volume I, chapter 32), pebbles (Volume I, chapter 27), crops (Volume I, chapter 17) and pottery (Volume I, chapter 23) have all been shown to be imported. These observations, taken into account with the indications of periodic occupation of Dhaskalio, would rather suggest that people from multiple settlements on different islands coming to Dhaskalio at perhaps fixed intervals were bringing their own kitchen ware and storage or transport jars (with their contents) than importing them from pot production centres on other islands or areas, as has aptly been pointed out by Hilditch (Volume I, 482).

