

McDONALD INSTITUTE MONOGRAPHS

E. S. S. Carlo

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





INSTAF

The Marble Finds from Kavos and the Archaeology of Ritual





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





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

Contributor Figures and Tables Abbreviatic	Plates	vii viii xvi xx
Preface Colin Re	nfrew & Michael J. Boyd	xxi
Acknowledge	ements	xxii
Part A Chapter 1	The Marble Finds from the Special Deposit South The Sculptures from the Special Deposit South: Introduction COLIN RENFREW	1 3
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 Appendix: Concordance of Special Find, Naxos Museum and Figure Numbers Daphne Lalayiannis & Michael J. Boyd	43 255
Chapter 4	The Stone Vessels Giorgos Gavalas Appendix: Quantitative Analyses of the Marble Bowl Fragments Neil Brodie	259 342
Chapter 5	The Provenance of the Marble Artefacts Dimitris Tambakopoulos & Yannis Maniatis	355
Part B Chapter 6	Dhaskalio and Kavos in Perspective The Pottery from Dhaskalio, the Special Deposit South and the Special Deposit North Compared PEGGY SOTIRAKOPOULOU	433 435
Chapter 7	The Fabric Study of the Pottery of Dhaskalio and Kavos JILL HILDITCH Appendix: Neutron Activation Analysis of Early Cycladic Ceramics from Kavos and Dhaskalio ANNO HEIN & VASSILIS KILIKOGLOU	445 494
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
Greek summ References Index Colour plates		559 567 577 583

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.	Plan of the Special Deposit South.	4
1.2.	The development of the Early Cycladic sculptures, showing the principal types and varieties.	8
1.3.	The Kapsala variety.	9
1.4.	The Spedos variety.	9
1.5.	The Kavos sub-variety.	11
1.6.	The Dokathismata variety.	12
1.7.	The Akrotiri sub-variety of the Dokathismata variety.	12
1.8.	The Chalandriani variety.	13
1.9.	The Kea sub-variety of the Chalandriani variety.	14
1.10.	The Special Deposit North sub-variety of the Chalandriani variety.	15
1.11.	The Apeiranthos variety.	17
1.12.	The Dhaskalio sub-variety of the Apeiranthos variety.	17
1,12,		17
Chapt	er 2	
2.1.	Estimated original heights of folded-arm figure fragments from the Special Deposit South.	20
2.2.	The treatment of the hair on heads of the Spedos variety.	22
2.3.	Paint ghost of the hair at the crown of the head.	23
2.4.	Eyes seen as paint ghosts on figurine heads of the Spedos and Dokathismata varieties.	24
2.5.	The head of 6275 , where the left eye can just be seen.	25
2.6.	Estimated original size range for sculptures of Spedos variety from the Special Deposit South.	25
2.7.	Figure fragments of the Kavos sub-variety from archaeological excavations or known before 1913.	27
2.8.	Estimated original size range for sculptures of Dokathismata variety from the Special Deposit South.	30
2.9.	Figurine fragments of the Akrotiri sub-variety from archaeological excavations or known before 1913.	30
2.10.	Estimated original size range for sculptures of the Chalandriani variety from the Special Deposit South.	32
2.11.	Figurine fragments of the Kea sub-variety from archaeological excavations or known before 1913.	33
2.12.	Detail of torso 2032 showing incisions of the fingers of the left hand.	33
2.13.	<i>The section at the lower break of</i> 2032 <i>indicating the fine quality of the workmanship.</i>	33
2.14.	Detail of the hands of torso 6614 .	34
2.15.	<i>Torso 6614, seen from above, indicating the regularity of the execution.</i>	34
2.16.	Estimated original size range for sculptures of the Keros variety from the Special Deposit South.	35
2.17.	The hands and lower arms of 20518 .	35
2.18.	The horizontal section of torso 20518 , seen at the lower break.	35
2.19.	Incisions, perhaps representing a baldric, on torso 20518 .	36
2.20.	Torso of male figure 4605 with the Keros flautist.	38
2.21.	The head 2194 compared with the head of the Keros harpist.	39
2.21.		07
Chapt	er 3	
3.1.	Sculptures of Spedos or Kapsala variety.	46
3.2.	Sculpture of Kavos sub-variety of Spedos variety.	47
3.3.	Sculpture of Kavos sub-variety of Spedos variety.	48
3.4.	Sculpture of Kavos sub-variety of Spedos variety.	49
3.5.	Heads of folded-arm figurines Spedos variety.	51
3.6.	Heads of folded-arm figurines of Spedos variety.	52
3.7.	Heads of folded-arm figurines of Spedos variety.	54
3.8.	Heads of folded-arm figurines of Spedos variety.	55
3.9.	Heads of folded-arm figurines of Spedos variety.	56
3.10.	Heads of folded-arm figurines of Spedos variety.	58
3.11.	Heads of folded-arm figurines of Spedos variety.	60
3.12.	Heads of folded-arm figurines of Spedos variety.	61
~		01

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

		104
3.65.	Pelves of folded-arm figurines of Spedos variety.	124
3.66.	Pelves of folded-arm figurines of Spedos variety.	127
3.67.	Pelves of folded-arm figurines of Spedos variety.	128
3.68.	Pelves of folded-arm figurines of Spedos variety.	129
3.69.	Pelves of folded-arm figurines of Spedos variety.	130
3.70.	Pelves of folded-arm figurines of Spedos variety.	131
3.71.	Legs of folded-arm figurine of Spedos variety.	132
3.72.	Legs of folded-arm figurine of Spedos variety.	133
3.73.	Legs of folded-arm figurines of Spedos variety.	135
3.74.	Legs of folded-arm figurines of Spedos variety.	136
3.75.	Legs of folded-arm figurines of Spedos variety.	137
3.76.	Leg of folded-arm figurine of Spedos variety.	138
3.77.	Legs of folded-arm figurines of Spedos variety.	140
3.78.	Legs of folded-arm figurines of Spedos variety.	141
3.79.	Legs of folded-arm figurines of Spedos variety.	143
3.80.	Legs of folded-arm figurines of Spedos variety.	144
3.81.	Legs of folded-arm figurines of Spedos variety.	146
3.82.	Legs of folded-arm figurines of Spedos variety.	147
3.83.	Legs of folded-arm figurines of Spedos variety.	149
3.84.	Legs of folded-arm figurines of Spedos variety.	150
3.85.	Legs of folded-arm figurines of Spedos variety.	151
3.86.	Legs of folded-arm figurines of Spedos variety.	152
3.87.	Legs of folded-arm figurines of Spedos variety.	154
3.88.	Legs of folded-arm figurines of Spedos variety.	155
3.89.	Legs of folded-arm figurines of Spedos variety.	156
3.90.	Legs of folded-arm figurines of Spedos variety.	158
3.91.	Legs of folded-arm figurines of Spedos variety.	160
3.92.	Legs of folded-arm figurines of Spedos variety.	161
3.93.	Legs of folded-arm figurines of Spedos variety.	163
3.94.	Legs of folded-arm figurines of Spedos variety.	164
3.95.	Legs of folded-arm figurines of Spedos variety.	165
3.96.	Legs of folded-arm figurines of Spedos variety.	168
3.97.	Legs of folded-arm figurines of Spedos variety.	169
3.98.	Legs of folded-arm figurines of Spedos variety.	170
3.99.	Legs of folded-arm figurines of Spedos variety.	170
3.100.	Feet of folded-arm figurines of Spedos variety.	174
3.101.	Feet of folded-arm figurines of Spedos variety.	175
3.102.	Feet of folded-arm figurines of Spedos variety.	176
3.102.	Feet of folded-arm figurines of Spedos variety.	170
	Feet of folded-arm figurines of Spedos variety.	177
	Feet of folded-arm figurines of Spedos variety.	170
3.105.	Torsos of folded-arm figurines of Akrotiri sub-variety of Dokathismata variety.	181
3.100.	Torsos of folded-arm figurines of Akrotiri sub-variety of Dokathismata variety.	182
3.107.	Heads of folded-arm figurines of Dokathismata variety.	183
3.109.	Heads of folded-arm figurines of Dokathismata variety.	185
3.110.	Heads of folded-arm figurines of Dokathismata variety.	185
3.110.		180
3.111. 3.112.	Heads of folded-arm figurines of Dokathismata variety. Necks of folded-arm figurines of Dokathismata variety.	187
3.112. 3.113.		189
	Torsos of folded-arm figurines of Dokathismata variety.	191 192
3.114.	Torsos of folded-arm figurines of Dokathismata variety.	
3.115.	Torsos of folded-arm figurines of Dokathismata variety.	194
3.116.	Torsos of folded-arm figurines of Dokathismata variety.	196 107
3.117.	Torsos of folded-arm figurines of Dokathismata variety.	197
3.118.	Torso (top) and waists of folded-arm figurines of Dokathismata variety.	198

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

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

4.68.	Joining pieces of talc schist.	340
4.69.	Fragment 345 , showing perforation.	341
4.70.	Linear regression of rim diameter on wall thickness of fragments drawn from the Special Deposit South	
	and Special Deposit North assemblages.	343
4.71.	Exponential regression of rim diameter on wall thickness of fragments drawn from the Special Deposit	
	South and Special Deposit North assemblages.	343
4.72.	Rim diameters of bowl fragments recovered from the Special Deposit North in 1987.	344
4.73.	Wall thicknesses of bowl fragments recovered from the Special Deposit North in 1987.	344
4.74.	Percentage rim circumference surviving against rim diameter from the Special Deposit North in 1987.	345
4.75.	Percentage rim circumference surviving against maximum dimension from the Special Deposit North	
	in 1987.	345
4.76.	Rim diameters of bowl rim fragments recovered from the Special Deposit South in 2006-8.	347
4.77.	Rim diameters of bowl rim fragments recovered from the Special Deposit North in 1987 and the	
	Special Deposit South in 2006-8.	347
4.78.	Wall thicknesses of bowl rim fragments recovered from the Special Deposit South in 2006-8.	348
4.79.	Wall thicknesses of bowl rim fragments recovered from the Special Deposit North in 1987 and the	010
1.7 .	Special Deposit South in 2006-8.	348
4.80.	Percentage rim surviving against diameter for the Special Deposit South.	349
4.81.	Rim fragments with measured rim diameters in the Special Deposit South.	350
4.82.	Rim fragments with measured wall thicknesses in the Special Deposit South.	351
4.83.	Rim fragments with rim diameters of 350 mm or more in the Special Deposit South.	352
4.84.	Rim fragments with wall thicknesses of 12 mm or more in the Special Deposit South.	353
1.01.	Run frugmentis with wait therefores of 12 mill of more in the opecan Deposit South.	000
Chapt	er 5	
5.1.	Overview of the geological sampling areas in the Cycladic Islands.	356
5.2.	Keros: crystalline limestones and marbles, and sampling locations.	358
5.3.	Box plots of the measured parameters for the Keros marble.	359
5.4.	Bivariate diagram of $Ln(Mn^{2+})$ versus $Ln(MGS)$ for the 3 groups of Keros marbles.	360
5.5.	Bivariate diagram of stable isotope signatures.	360
5.6.	Map of Naxos showing marble zones, sampled areas, prehistoric sites, and ancient marble quarries.	361
5.7.	A large marble deposit located on the east hill above the Spedos bay in southeast Naxos.	362
5.8.	Marble deposit of grey colour south of Volakas 'port' in southeast Naxos.	362
5.9 .	House-wall built of grey and dark-blue marble on Dhaskalio.	364
5.10.	Veins of good quality calcitic marble in central-east Naxos close to Moutsouna Bay.	364
5.11.	Naxos box plots of the measured parameters for the various marble groups.	365
5.12.	Bivariate plot of $Ln(Mn^{2+})$ versus $Ln(MGS)$ for Naxos.	366
5.12.	Bivariate plot of stable isotope signatures for Naxos.	366
5.14.	Bivariate plot of stable isotope signatures for all the calcitic and all dolomitic marbles of Naxos.	366
5.15.	Map of Paros with marble zones and sampling areas.	367
5.16.	Box plots of the measured parameters for the Paros marbles.	368
5.17.		369
5.17.	Bivariate plot of $Ln(Mn^{2+})$ versus $Ln(MGS)$ for the Paros marble groups. Bivariate plot of stable isotope signatures for the Paros marble groups.	369
5.10. 5.19.	The island of Nikouria, showing marble distribution and sampling points.	369
5.20.		
	Box plots of the measured parameters for the Nikouria marbles.	370
5.21.	Bivariate plots of $Ln(Mn^{2+})$ versus $Ln(MGS)$ and stable isotopes for the Nikouria marbles.	371
5.22.	Map of Ios showing marble distribution, sampled areas and prehistoric sites.	371
5.23.	Box plots of the measured parameters for the los marble groups. P_{i} and P_{i} and	372
5.24.	Bivariate plot of $Ln(Mn^{2+})$ versus $Ln(MGS)$ for the los marble groups.	373
5.25.	Bivariate plot of the stable isotopes for the Ios marble groups.	373
5.26.	<i>Bivariate plot of the stable isotope signatures of all calcitic and all dolomitic marbles of Ios.</i>	373
5.27.	Map of Schoinoussa and Iraklia with distribution of schist and marble.	374
5.28.	Map of Syros showing marble zones, sampled areas and prehistoric sites.	375
5.29.	Box plots of the measured parameters for the Suros marbles.	376

5.29. Box plots of the measured parameters for the Syros marbles. **5.30.** Bivariate plot of $Ln(Mn^{2+})$ versus Ln(MGS) for the north Syros calcitic marbles.

377

5.31.	Bivariate plot of stable isotope signatures for the Syros marble groups.	377
5.32.	Box plot diagram of the MGS for the various groups of Cycladic Marbles.	377
5.33.	Box plot diagram of the Mn^{2+} parameter for the various groups of Cycladic marbles.	377
5.34.	Box plot diagram of the Width parameter for the various groups of Cycladic marbles.	378
5.35.	Box plot diagram of Fe3+ parameter for the various groups of Cycladic Islands.	378
5.36.	Box plot diagram of the δ^{13} C‰ parameter for the various groups of Cycladic marbles.	378
5.37.	Box plot diagram of the $\delta^{18}O$ % parameter for the various groups of Cycladic groups.	378
5.38.	Bivariate diagram of $Ln(Mn^{2+})$ versus $Ln(MGS)$ for the various Cycladic marble groups.	379
5.39.	Bivariate diagram of δ^{13} C‰ versus δ^{18} O‰ for the various Cycladic marble groups.	379
5.40.	Example of transparency and grain size examination with a cold light source.	380
5.41.	Heavily weathered figurine.	380
5.42.	Typical figurine sampling spot.	381
5.43.	Histogram showing the distribution of the MGS measured for all the figurines.	395
5.44.	MGS distribution of Spedos variety, including the Kavos sub-variety.	395
5.45.	MGS distribution of Dokathismata, Akrotiri sub-variety, fragmentary and indeterminate,	
	Chalandriani, and Keros varieties.	396
5.46.	MGS of figurines of Apeiranthos variety, Dhaskalio sub-variety, schematic figurines of uncertain	
	variety, unfinished folded-arm figurines, and figurines of other type.	397
5.47.	<i>Histogram showing the distribution of marble colours observed in all figurines.</i>	398
5.48.	Histogram showing the distribution of marble colours observed in figurines of Spedos variety.	398
5.49.	Distribution of marble colours for figurines of various varieties and sub-varieties.	399
5.50.	Distribution of marble colours for figurines of various types and varieties.	400
5.51.	Characteristic EPR spectrum of calcitic marble containing dolomite.	403
5.52.	Bivariate diagram of $Ln(Mn^{2+})$ versus $Ln(MGS)$ for the Keros figurines against the various marble	
	groups of the Cycladic Islands.	404
5.53.	Diagram of δ^{13} C‰ versus δ^{18} O‰ parameters for the Keros figurines against the various marble	
	groups of the Cycladic Islands.	404
5.54.	Discriminant analysis between the marble groups.	406
5.55.	General provenance histogram for all figurines by island.	410
5.56.	Provenance histogram for all figurines by marble group.	410
5.57.	Provenance of all Spedos variety figurines analysed.	412
5.58.	Provenance of all Dokathismata variety figurines analysed.	412
5.59.	Provenance of all Chalandriani variety figurines analysed.	412
5.60.	Provenance of all Keros variety figurines analysed.	413
5.61.	Provenance of all Apeiranthos variety figurines analysed.	413
5.62.	Provenance of figurines of the Dhaskalio sub-variety analysed.	413
5.63.	Provenance of the unfinished folded-arm figurines analysed.	413
5.64.	View of Kouphonisi and Keros from Pyrgos Kanaki (southeast Naxos).	418
5.65.	View of Kouphonisi and Keros from the Moutsouna-Apeiranthos road (central-east Naxos).	418
5.66.	Guide to the places of origin of the Keros figurines by type or variety.	419
5.67.	Histogram of MGS distribution for all vessel fragments examined.	421
5.68.	Histogram of MGS distribution among the various types of vessels.	421
5.69.	Histogram of marble colour distribution among the 140 vessels fragments examined.	422
5.70.	Histogram of marble colour distribution for all the bowls examined.	422
5.71.	Histogram of marble colour distribution for all the basins examined.	422
5.72.	Diagram of $Ln(Mn^{2+})$ versus $Ln(MGS)$ parameters for the Keros marble vessels against the various	
	marble groups of the Cycladic Islands.	425
5.73.	Diagram of δ^{13} C‰ versus δ^{18} O‰ parameters for the Keros marble vessels against the various	
	marble groups of the Cycladic Islands.	425
5.74.	Summarized provenance results for all vessels analysed, by island.	426
5.75.	Summarized provenance results for all vessels analysed, by different marble group.	428
5.76.	Summarized provenance results for all bowls analysed, by different marble group.	428
5.77.	Summarized provenance results for the basins analysed, by different marble group.	428
5.78.	<i>Vessel</i> 192 <i>made of dull grey marble with striations.</i>	428

5.79. 5.80.	Wall built with local slabs of blue/grey marble with white striations at Kastro Kanaki in southeast Naxos. Vessel 364 made of a white transparent marble.	429 430
Chapte	ar 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
0.2.		107
Chapte	er 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
Chapte	or 8	
8.1.	<i>Reflected light photomicrograph of sample from K7P18 showing fayalite, magnetite, matte prills, in glass.</i>	506
8.2.	Reflected light photomicrograph of sample from KN65, showing large magnetite aggregate in slag with	000
0.2.	elongated kirschteinite, 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,	007
0.1	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	511
0.0.	with vitrified ceramic areas.	511
8.7.	Reflected light photomicrograph of slag on metallurgical ceramic KN190, showing glassy matrix and	011
0.7.1	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	011
01201	numerous copper prills.	518
8.11.	Reflected light photomicrograph of sample from 8309 , showing fayalite, magnetites, glass, and	010
	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	0_0
	at centre of sample.	523
8.17.	Adze-axe 12734 and 12735 showing sampling location.	524
8.18.	<i>Reflected light photomicrograph of sample from</i> 12734 <i>showing directional porosity.</i>	524
8.19.	Reflected light photomicrograph of sample from 12734 after etching.	524
8.20.	<i>Chisel</i> 12740 <i>showing sampling location and extracted sample.</i>	525
8.21.	<i>Reflected light photomicrograph of sample from</i> 12740 <i>after etching.</i>	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
Chart		
Chapte 0 1		540
9.1. 9.2	Objects found on and above Floor P in Trench I on Dhaskalio.	542 543
9.2.	Funnel necked jars found on and above Floor Q in Trench I on Dhaskalio.	543
Colour	r plates (at rear)	
Plate 1	a. The islet of Dhaskalio from Kavos (from the northeast).	585
Plate 1	b. <i>The islet of Dhaskalio from Kavos (from the southeast).</i>	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.	2010 in situ <i>in Trench D2 layer 3</i> .	587
Plate 3b.	437 in situ <i>in Trench D3 layer 5</i> .	587
Plate 4a.	1989 , 1990 and 1992 in situ in Trench C1 layer 21.	588
Plate 4b.	1987 , 1988 and 1989 in situ in Trench C1 layer 21.	588
Plate 5.	Figurine fragments of Spedos variety.	589
Plate 6.	Figurine fragments of Dokathismata variety.	590
Plate 7.	Figurine fragments of Chalandriani variety.	591
Plate 8.	Figurine fragments of Keros variety.	592
Plate 9.	Fragments of schematic figurines.	593
Plate 10.	Figurine fragments of Akrotiri sub-variety of Dokathismata variety and Kea sub-variety of	
	Chalandriani variety.	594
Plate 11.	Waist (2207) and pelvis (6478) of folded-arm figurine of Spedos variety.	595
Plate 12.	Marble vessel fragments from Trench C1, layer 21 and Kouphonisi limestone vessel fragments.	596
Plate 13.	Metal objects from the Hall.	597
Plate 14.	Photomicrographs of examples for petrographic fabric groups.	598
	Photomicrographs of examples for petrographic fabric groups.	599
	Photomicrographs of examples for petrographic fabric groups.	600

Tables

Chapter 2

2.1.	Frequencies of occurrence of types, varieties and sub-varieties of figurine fragments of the Special Deposit South.	19
Chapte	er 3	

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

Chapter 4

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

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

4.76.	Joining pieces of coloured limestone and their findspots.	339
4.77.	<i>Joining or related pieces of talc and chlorite schist and their findspots.</i>	340
4.78.	Precision statistics for 21 rim fragments.	342
	<i>J J J J</i>	
Chapte	er 5	
5.1.	<i>Results of the</i> in situ optical examination for all the figurines.	382–94
5.2.	Results of analysis for the Keros figurines.	401-2
5.3.	Final provenance assignment of the analysed Keros figurines.	407-9
5.4.	Results of analysis for the Keros vessels.	423-4
5.5.	Final provenance assignment of the analysed Keros vessels.	426–7
Chapte	er 7	
7.1.	Comparison between the Special Deposit South, Dhaskalio and Kavos 1987.	446
7.2.	List of trenches and phases sampled for petrographic analysis.	448
7.3.	Summary of samples by petrographic fabric.	450
7.4.	Correlation of chemical, petrographic and macroscopic samples analysed.	458-9
7.5.	Summary of petrographic samples by site and phase.	461
7.6.	Summary of shape frequency by petrographic fabric.	462-3
7.7.	Summary of petrographic fabrics with the greatest identified range of vessel function.	465
7.8.	High biotite, fossil-bearing, granitic-derived.	465
7.9.	Coarse, granitic-derived, macrofossils, calcareous-rich clays, possible mixing.	466
7.10.	Granitic sand temper, with clay mixing?	466
7.11.	Sandstone-rich.	467
7.12.	Sand-tempered metamorphic quartz and calcareous-rich inclusions.	467
7.13.	Coarse meta-granite inclusions with dense biotite-rich fine fraction and varied accessory minerals.	468
7.14.	Non-fossiliferous, non-calcareous, granitic-derived inclusions.	469
7.15.	Granite and flysch-derived sand-tempered inclusions.	470
7.16.	Very coarse granitic-derived sand with organic-temper.	471
7.17.	Calcareous sediment.	471
7.18.	Non-calcareous, quartz-feldspar inclusions, biotite-rich fine fraction with accessory green amphibole,	
	clinozoisite and garnet.	472
7.19.	Calcareous-rich (micrite, filaments and microfossils), granitic-derived with fine fraction mica.	472
7.20.	Granitic-derived fabric with silty clay inclusions, biotite-rich and micrite-bearing fine fraction.	473
7.21.	Non-calcareous, muscovite-rich, quartz-feldspar inclusions with accessory green amphibole.	473
7.22.	Non-calcareous, densely packed quartz-feldspar and chert with accessory green amphibole and biotite.	474
7.23.	Micaceous schist with glaucophane, garnet and variable micrite inclusions.	474–5
7.24.	Quartz-feldspar-mica schist with common iron oxides.	475
7.25.	Semi-coarse fabric with quartz-feldspar-mica-epidote-clinozoisite schist and shell filaments.	476
7.26.	Quartz-feldspar-clinopyroxene-green amphibole schist with severely altered feldspars.	476
7.27.	Quartz-garnet phyllite.	477
7.28.	Biotite phyllite.	477
7.29.	Chlorite schist.	478
7.30.	Calcareous clay with fossil-bearing calcareous rock fragments and volcanic inclusions: minor phyllite	170
F 01	and wackestone.	478
7.31.	<i>Calcareous clay with volcanic rock inclusions and micrite (fossiliferous?)</i>	480
7.32.	Non-calcareous clay with volcanic rock inclusions and common fine fraction mica: sand tempered?	480
7.33.	Non-calcareous clay with volcanic rock sand temper.	481
7.34.	Non-calcareous clay with volcanic rock inclusions and common fine fraction mica: sand tempered?	482
7.35.	<i>Calcareous clay with fossil-bearing calcareous rock fragments, devitrified volcanic glass and</i>	400
F D (fine-grained volcanic inclusions.	482
7.36.	Non-calcareous clay with volcanic rock and biotite-rich phyllite inclusions.	483
7.37.	Non-calcareous clay with andesitic volcanic rock inclusions.	484
7.38.	Very fine, plagioclase feldspar, biotite-rich.	484
7.39.	Red oxidized lava, microlitic volcanic rock.	484

7.40.	Volcanic rock sand-tempered, muscovite-rich.	485
7.41.	Dark phyllite with sparite/micrite (non-biogenic) and quartzite.	485
7.42.	Red phyllite (crenulated).	486
7.43.	Red/dark brown phyllite with calcite.	486
7.44.	Talc.	487
7.45.	Crushed calcite, micrite sand and dark phyllite.	487
7.46.	Crushed calcite, no micrite, quartz-series rock fragments.	488
7.47.	Crushed calcite, quartz and mica (variable).	488
7.48.	Loners.	489
7.49.	Calcareous fossiliferous.	489
7.50.	Pale fabric with calcareous haloes.	489
7.51.	Micrite, non-biogenic.	490
7.52.	Grey fabric with occasional quartz and iron oxide in FF.	490
7.53.	Highly OA, polycrystalline quartz and muscovite rich.	491
7.54.	Fine clay with high percentage of biotite in FF.	491
7.55.	Micaceous fabric with amphiboles and clinozoisite.	492
7.56.	Fine, iron-rich fabric.	492
7.57.	Fine with calcite and micrite.	492
7.58.	Chemical groups A, B, C, D, E and F: average concentrations and standard deviations considering	
	a best relative fit.	497
7.59.	Chemical groups G, H, I and J: average concentrations and standard deviations considering	
	a best relative fit.	498
Chapte	er 8	
8.1.	Analyses of Certified Reference Materials on the SEM-EDS and microprobe.	504
8.2.	Bulk analyses for Kavos Promontory slags using SEM-EDS.	505
8.3.	SEM-EDS analyses on prills in samples KN65, K7P32, and MKN7.	507
8.4.	SEM-EDS analyses of ceramic and slag areas in metallurgical ceramics from Kavos Promontory.	510
8.5.	Lead isotope analysis results from metals and metallurgical remains from Dhaskalio and Kavos.	513
8.6.	SEM-EDS and microprobe analysis of copper-based artefacts from Dhaskalio.	516
8.7.	Bulk compositions of slags, metallurgical ceramics, and litharge from Dhaskalio.	517
8.8.	Analyses (SEM-EDS) of metallic phases found in slags from Dhaskalio.	517
8.9.	Qualitative data from portable XRF analyses on copper-based artefacts from Dhaskalio.	520
8.10.	Bulk and phases analyses of speiss sample 11541 taken in SEM-EDS.	522
Chapte	er 9	
9.1.	Quantitative comparison of various find types at Dhaskalio and in the Special Deposit South.	545
Chapte	er 10	
10.1.	Phases, culture groups and calendar dates at Dhaskalio.	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
Т.	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 welldocumented 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 Zapheiropoulou, and Lila Marangou for their warm support for the enterprise. In particular Christos Doumas and Photeini Zapheiropoulou 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 Chamilothori.

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.

Chapter 2

The Sculptures from the Special Deposit South: The Finds

Colin Renfrew

The sculptural finds from the Special Deposit South are presented in detail in the catalogue below which constitutes Chapter 3 of the present volume. Here some aspects of the finds are further considered. The contexts have been set out in detail in chapter 4 of Volume II of the present work and are further considered in the chapter 'Assemblage Studies' by Michael Boyd, which forms chapter 12 of Volume II. As noted in Chapter 1 above, one notable feature of the Cycladic sculptures is their tendency to fall into well-defined types and varieties. This is true as much for the schematic sculptures as for the sculptures of folded-arm form which constitute the bulk (more than 90 per cent) of the assemblage.

The sculptures of Canonical folded-arm form

The sculptures found at Kavos, like those from the Early Cycladic cemeteries, do in general fall into very

clear varieties (Table 2.1), as discussed in Chapter 1. The most abundant fragments are those of the Spedos variety (333 examples), followed by 86 of the Dokathismata variety and 34 of the Chalandriani variety. As we shall see below, there are also 18 that have been classified as of the Keros variety. In an earlier preliminary classification this was listed as the 'Chalandriani related variety'. But to use the site name Chalandriani a second time could cause confusion, so the designation 'Post-Canonical' (first proposed by Thimme in 1977) was initially used in Volume II for this variety (chapters 4 and 12). The term 'Keros variety' is now preferred (see Chapter 1, above).

Size

The procedure used for estimating the original size, when complete, of each of the folded-arm figure fragments is set out in the Appendix to this chapter

Туре	Variety	Sub-variety	Total	.S		
	Spedos or Kapsala	(none)		2		
	Spedos	(none)	330	333	498	
		Kavos	3			
	Dokathismata	(none)	80	86		
Folded-arm		Akrotiri	6			549
figurine	Chalandriani	(none)	32	34		
0		Kea	2			
	Keros	(none)		18		
	Unfinished	(none)		6		017
	Fragmentary and indeterminate	(none)		19		
Special	(none)	(none)			3	
Other	(none)	(none)			8	
	Apeiranthos	(none)	8	35	40	
Schematic		(Dhaskalio)	27			
	(none)	(none)	5			

Table 2.1. Frequencies of occurrence of the types, varieties and sub-varieties of the figurine fragments of the Special Deposit South.

Chapter 2

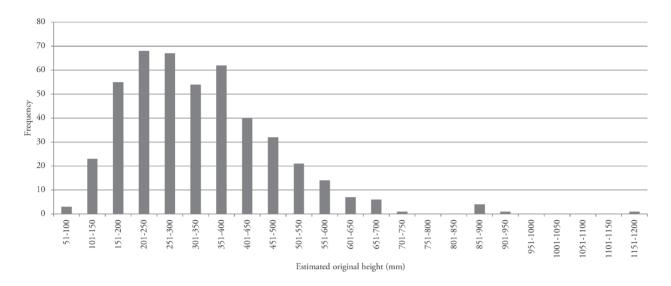


Figure 2.1. Estimated original heights of folded-arm figure fragments from the Special Deposit South.

below. The overall result for the folded-arm sculptures recovered is seen in Figure 2.1. Note that, of the 498 folded-arm figurine fragments recovered, it has only been possible to estimate original heights for 459 of them; the other 39 are excluded from the figure.

The sculptures, when complete, prior to fragmentation, thus most frequently lay in the ranges 200–300 mm and 300–400 mm. That would tally well enough with the complete sculptures published from the known Cycladic cemeteries. The largest recovered from an excavated and published cemetery is in the National Archaeological Museum in Athens (EAM6195 from Tomb 10 at Spedos on Naxos: Papathanasopoulos 1962, pl. 10 α) which is 587 mm in height. The only complete figure of comparable size from a more recent published excavation is the one recovered by Zapheiropoulou from the Special Deposit North at Kavos (Zapheiropoulou 2017) which measures 583 mm in height.

Nine large sculptures from the Special Deposit South, originally larger than 700 mm in height, all of the Spedos variety, have previously been described in a preliminary publication (Renfrew & Boyd 2017): they are included in the catalogue which follows. They are discussed briefly in the section on the Spedos variety below. They may be compared with ten recently published large pieces from the Special Deposit North, recovered in controlled excavations (Sotirakopoulou *et al.* 2017).

It is worth noting here that several large sculptures, mainly found in rather uncertain circumstances, were documented prior to 1914. As discussed in Chapter 1 above (see also Renfrew 2017a), these are regarded as likely to be authentic and so relevant to the discussion. Most very large sculptures seem to be of the Spedos variety, although Ashmolean Museum AE176 is of the Dokathismata variety. The head in Athens from Amorgos (EAM3909) has been regarded as 'precanonical' and a sculpture of the Kapsala variety has been chosen here as the comparandum piece for it. The largest sculptures hitherto known (and documented prior to 1914) are as follows. As discussed below they are now supplemented by several fragmentary pieces from the Special Deposit South at Kavos, as well as from the Special Deposit North.

- Louvre head 'from Keros' (Ma2709, MNB 509), acquired 1873 (Marangou 1990a, 167 nos. 33–35; Michon 1929, 255, fig. 5; Zervos 1957, pls. 159–61). Height 270 mm. Estimated height of complete figure: 1630 mm. (Comparandum for size: Athens EAM6140.21 from Naxos: Papathanasopoulos 1962, pl. 54α).
- Complete figure 'from Amorgos'. National Archaeological Museum, Athens (EAM3978): this piece entered the Archaeological Society for Stone Finds on 9 March 1885 (where it had Inventory number 4223) by purchase from Ioannis Palaiologos of Amorgos (Galanakis 2013, 185; Wolters 1891, 47 and note 1; Zervos 1957, pls. 297 and 299). Height 1490 mm.
- 3. Head allegedly 'from Amorgos' in Copenhagen (National Museum 4697), acquired 1896 (Renfrew 1969, pl. 8a; Riis *et al.* 1989, 22–3, no. 10). Height 246 mm. Estimated height of complete figure: 1260 mm. (Comparandum: NM4675, Zapheiropoulou 1969, pl. 243). This head is attributed by Getz-Gentle (2001) to the 'Goulandris Sculptor' (i.e. Kavos sub-variety).
- 4. Head 'from Amorgos' in the National Archaeological Museum, Athens (EAM3909): this piece

entered the Archaeological Society for Stone Finds (Inventory Number 4270) by purchase from Ioannis Palaiologos of Amorgos (Galanakis 2013, 185; Wolters 1891, 46–7; first published in *Praktika tis en Athenais Archaeologikis Etaireias* 1888, 62–3, under the heading 'Aq $\chi \alpha \bar{\alpha} \alpha \dot{\alpha} \gamma o q \alpha \sigma \theta \dot{\epsilon} v \tau \alpha'$; Zervos 1957, pls. 177–8). Height 280 mm. Estimated height of complete figure: 1200 mm. (Comparandum: NM5463 from Aplomata: Doumas & Lambrinoudakis 2017, fig. 15.12).

 Complete figure, Ashmolean Museum, Oxford, allegedly 'from Amorgos', (AE 176), acquired 1898. (Hogarth 1927, pl. VIII a; Sherratt 2000, 155–6: III.7.25, pls. 183–6; Zervos 1957, pl. 162). Height 759 mm. Dokathismata variety.

These are the principal large figures (of original height greater than 750 mm) which are well documented prior to 1914. Several large figures acquired on the illicit market after the Second World War, including (a) the large Goulandris Museum figure (NPGM 724: Getz-Gentle 2001, pl. 64 c, height 1400 mm); (b) the figure formerly in Karlsruhe, now in Athens (EAM20934: Getz-Gentle 2001, pl. 64 b, height 890 mm); (c) the Bradley Martin head now in the Metropolitan Museum (L 55.59: Thimme & Getz-Preziosi 1977, 279, pl. 199, estimated original height perhaps almost 2000 mm), all of the Spedos variety, are not discussed here in view of their lack of secure provenance.

As Galanakis (2013) has pointed out, with the exception of the Louvre head ('from Keros'), the provenance of many of the others ('from Amorgos') may perhaps leave open the possibility of a source for these pieces in an island of the Mikres Kyklades, centred upon Keros. There does therefore remain the possibility that many of these pieces might have been found on Keros itself. That, however, remains simply a possibility which it would be premature to formulate as a hypothesis.

It should be noted also that, were it the case that these mostly fragmentary pieces did all derive from Keros, this would not yet clarify their place of production (nor of fragmentation). For these sculptures were certainly not produced on Keros, where suitable high-grade marble is not available (Volume I, chapter 3). The evidence from the excavations at the Special Deposit South suggests that they were not broken at that location. The provenance of the marble used to make the sculptures found in the Special Deposit South is discussed by Maniatis & Tambakopoulos in Chapter 5 of the present volume.

Paint ghosts

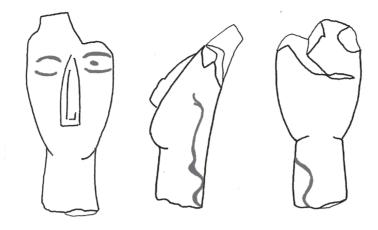
A further important issue, on which the finds from the Special Deposit South can unfortunately cast only a little light, is the evidence that many of the Early Cycladic sculptures originally had painted decoration. Indeed, some seem to have been re-painted on a number of occasions (Hendrix 2003; Hoffman 2002). The conditions of preservation in the Special Deposit South are less favourable than in the Special Deposit North, where traces of paint can still be seen on some marble vessels and sculptures.

Paint ghosts are sometimes seen on Early Cycladic sculptures (Birtacha 2017). They are decorated surfaces, seen today in low relief or with a less weathered surface, where the paint or its fixative have preserved the original surface of the marble from solution or erosion caused by acidic groundwater, so that the areas originally painted are better preserved, or even raised slightly above the remaining surface areas, although no pigment is now preserved. In some cases, traces where paint was originally applied can be recognized by light incisions in the surface: these may originally have been made to allow the paint to adhere to the smooth surface of the marble.

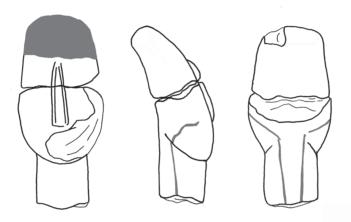
Traces of such painted decoration are seen mainly on the faces of Cycladic sculptures of the Spedos and Dokathismata varieties, although the decoration sometimes extended to the body. Just a few sculptures of the Kapsala variety, deriving from unauthorized excavations but very possibly genuine, also have painted decoration.

In the Special Deposit South, traces of decoration have been discerned in a few cases, but rarely with great confidence. Eyes in particular have been claimed. But very few of these are convincing, and to see them at all sometimes depends on the angle at which the light falls. The observations made here about paint ghosts (or about incisions on the face) should be read with caution as preliminary suggestions. A more thorough and systematic study would be needed to draw more reliable conclusions (see Birtacha 2017). In any case the material from the Special Deposit South is generally too eroded to preserve paint ghosts well. Sometimes the traces of eyes, when more than one is preserved, can seem asymmetrically placed with an effect that is today disconcerting. This is probably the result of the differential preservation of successive episodes of decoration.

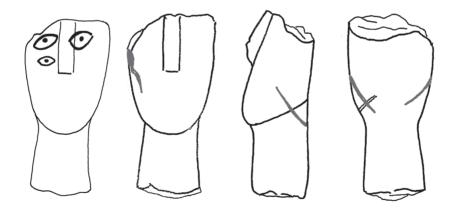
Quite a few of the heads show a widening or elongation at the crown, sometimes giving a lyreshaped effect to the head. This may be the result of a decision to show the hair using a continuous surface which does not make a distinction in the marble between the hair and the cranium itself, but instead using the application of paint which is now no longer visible. In such cases the crown of the head may sometimes have been painted so as to represent



6476



40027



1929

Figure 2.2. The treatment of the hair on heads of the Spedos variety. (Note the lock of hair at the side of the head of **6476**, the paint ghost at the crown of **40027** and the hair at the back of the head and neck of all three heads). Not to scale.

the hair. This originally painted surface at the crown, now indicated by a paint ghost, is particularly clear in some of the sculptures from the Special Deposit North (e.g. NM4182: Volume VII). On occasion, separate small tresses of hair, indicated by a sinusoidal line, may be discerned.

The hair is usually shown descending at the back of the head, narrowing at the back of the head, and can be seen as a paint ghost in several pieces in the Special Deposit North (Volume VII). The same effect can be discerned in several pieces from the Special Deposit South (e.g. **6476**, **40027** and **1929**), although they are not well preserved and illumination by a slanting direct light is required to see them (see Fig. 2.2).

The distinction between the formerly painted hair, indicated by the better preserved surface, and the more weathered unpainted surface can be seen on the left side of the head, at the back, in **6476**, but is no longer clear on the right side. Similar indications of hair are seen on **40027** (Figs. 2.2, 2.3).

Indications of the hair at the back of the head have not been seen for the Dokathismata or Chalandriani varieties in the Special Deposit South (with the possible exception of **972**), and so far are recorded only for the Spedos variety.

Traces of one or more eyes have at times been recognized on the following heads: 966, 6275, 3103, 6476, 25029, 6322, 1562 and 1929. For convenience some of these are represented together on Figure 2.4, and are omitted from the drawings accompanying the catalogue in Chapter 3. Sometimes the upper and lower eyelids were represented, giving an ellipsoid form to the eye, in the centre of which the pupil may be indicated by a dot. Sometimes the eyebrows are also shown by a convex shape situated above the upper eyelid and echoing its form. In most cases these features are difficult to see and usually are not visible in the accompanying photographs. Traces of eyes have been recognized, although not with great confidence, on some heads of the Dokathismata variety (see 351, 972, 814 and 1927 in Fig. 2.4).

The paint ghosts are often difficult to discern, except in raking light, and very difficult to photograph. The left eye can, however, just be seen indicated by the upper and lower eyelids and the pupil on **6275** (Figs. 2.4, 2.5)

The Spedos variety sculptures

The most abundantly found fragments of sculptures of the canonical folded-arm form found in the Special; Deposit South at Kavos were of the Spedos variety: 333 fragments in total.

Size

The discussion in the paragraphs above of the size of the sculptures in the Special Deposit South is particularly relevant for the Spedos variety, since nearly all the sculptures in the first quartile (by size) of canonical folded-arm figurines in general are of the Spedos



Figure 2.3. *Paint ghost of the hair at the crown of the head, seen as a paler, less weathered surface on* **40027***. Not to scale.*

variety. That is certainly true of the Special Deposits at Kavos. The size distribution of the sculptures of Spedos variety found in the Special Deposit South, prior to breakage, is given in Figure 2.6. It naturally relates to a portion of the sculptures represented in Figure 2.1, above, from which the other varieties have here been excluded.

The analysis undertaken here leads to the important conclusion that all of the sculptures in the Special Deposit South which were originally more than 600 mm in height were of the Spedos variety. That is certainly true for the Special Deposit South and for the fragments recovered in the controlled excavations from the Special Deposit North. It seems, however, to be the case also for the sculptures recovered from the Cycladic cemeteries.

The largest sculptures (before breakage) recovered from the Special Deposit South, all of the Spedos variety, have been reviewed by Renfrew & Boyd (2017a). The details, with comparanda, are seen in the catalogue in Chapter 3. For convenience the largest are also mentioned here. (Abbreviations for the comparanda are set out in the introduction to the catalogue).

The most imposing was the waist (**2207**), found in Trench B4, layer 5, and the pelvis with thighs (**6478**), found deep in Trench D2, layer 34. These join



Figure 2.4. *Eyes seen as paint ghosts (some uncertain) on figurine heads of the Spedos (lines 1 and 2) and Dokathismata (line 3) varieties. Scale 1:2.*

to form the composite fragment **40003** (Figs. 3.46–49). It should be noted that both were found in the central area of the Deposit, but more than 5 m apart. Had the original complete figure been broken at the Special Deposit South, other fragments would presumably have been found there. Their absence from the material recovered is a strong indication that the breakage took place elsewhere. (The possibility that such breakage took place at the location of the Special Deposit North was considered and rejected in chapter 13B of Volume II, 381–2). In order to estimate the original

size of the figure when complete (see Renfrew & Boyd 2017a), comparanda selected for the waist (EAM6140.21 from Dokathismata Tomb 13, NM4677 and NM4675) gave size estimates of 870 mm, 1060 mm and 770 mm. Those for the pelvis (NM4673, with alternatives EAM6140.22 and EAM6195 from Spedos Tomb 10) gave estimates of 1160 mm, 960 mm and 1000 mm. Taking the two conjoined pieces together, the comparandum EAM6195 from Spedos Tomb 10 gives estimates of 1000 mm or 916 mm, and NM4677 gives 1060 mm or 1200 mm. It was concluded that the

original height was of the order of 1000 mm, with an error margin of around 10 per cent.

The second figure represented, judged in terms of original height, was documented by **872**, the left upper leg of a sculpture found in Trench B3, layer 4 (Fig. 3.76). The comparandum piece was from Spedos Tomb 13, and the resulting size estimate was 950 mm. But it was considered possible that this fragment was from the calf rather than the thigh of the figure, which would then have given a greater size estimate. The remaining figures estimated to be as large or larger than 700 mm in original height, all of the Spedos variety (Renfrew & Boyd 2017a), are: **2764** (fragmentary head: 900 mm, Fig. 3.12); **25061** (foot: 900 mm, Fig. 3.108); **2816** (lower leg: 860 mm, Fig. 3.94); **6291** (foot: 750 mm, Fig. 3.102); **625** (arms and waist: 700, Fig. 3.43); **1439** (waist: 700 mm, Fig. 3.55) and **20149** (neck: 700 mm, Fig. 3.16).

It should be appreciated that these size estimates, taken often from very fragmentary surviving pieces, are only approximations. In some cases the error margin may be well over 10 per cent. Yet they do give an idea of the scale of the original sculptures. Other such measurements will be found throughout the catalogue and it is not necessary to reiterate them here. It is clear, however, that the Special Deposit South has fragments of more than 20 sculptures which were originally more than 599 mm in size, and thus larger than any documented from the Early Cycladic cemeteries. The same can be documented from the finds documented through excavation in the Special Deposit North (Sotirakopoulou *et al.* 2017)

It is very clear from these results that a small proportion of the folded-arm sculptures represented in the Special Deposit South, some 5.2 per cent of the



Figure 2.5. *The head of* **6275***, where the left eye can just be seen. (See also Fig.* 2.4)*. Not to scale.*

total, can be regarded as large figures, greater in size than any yet recovered from the published cemeteries (i.e. maximum height 587 mm in Spedos Tomb 10). This securely documented observation may well have implications for the original use of the figures. For while some figures of smaller size could well be carried in processions on festive occasions, as has been hypothesized in Volume II and is further discussed in Chapter 10 below, the monumental figures of the order of one metre in height are too heavy to be car-

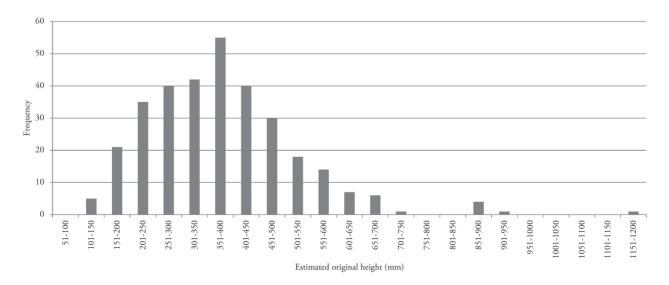


Figure 2.6. Estimated original size range for sculptures of Spedos variety from the Special Deposit South.

ried by a single person. If carried by several people, they would be difficult to hold upright, although they could certainly be carried on a stretcher or bier. The possibility has therefore to be contemplated that the sculptures had more than one potential function. The small ones could certainly function as portable ikons, and were indeed sometimes buried in graves. The monumental ones could scarcely have functioned in this way. It is possible to imagine them as displayed permanently in a special building or shrine, but no evidence for such an installation has yet been discovered.

Fragments of Kapsala or Spedos variety

Just two sculptural fragments were excavated in the Special Deposit South which might be attributed to the Kapsala variety (Fig. 3.1). But since these are very fragmentary (both right feet only), it seems safer to regard them as 'Kapsala or Spedos', rather than to affirm the presence of Kapsala variety sculptures in the Deposit, which might have significant chronological implications. For, as discussed in Chapter 1, it does now seem possible, on stratigraphic grounds, to regard the tombs at the Aplomata cemetery in Naxos (Doumas & Lambrinoudakis 2017) as representing an early phase of the Keros-Syros culture. This would set the Kapsala variety as the earliest folded-arm form, as already proposed on typological grounds (Renfrew 1969, 21).

The pieces in question (Fig. 3.1) are **1304** from Trench C2, layer 25, and **25026** from Trench RA, layer 6. The plastic modelling and curved instep of **1304** (which seems to have been joined at the ankles) is suggestive of the Kapsala variety, although the toes are not preserved. The incised toes of **25026** are indeed preserved, and probably imply that it is of the Spedos variety: it is not clear whether this figure joined at the ankles.

The scarcity or absence of sculptures of the Kapsala variety from the Special Deposit South is perhaps the best indicator of the date of the first use of the Deposit. Finds of sauceboats and other forms in the pottery securely date the early use of the Deposit to the time of the Keros-Syros culture. The absence (or scarcity) of the Kapsala variety suggests that the Deposit's first use was not at the very beginning of the time range of the Keros-Syros culture.

The Kavos sub-variety of the Spedos variety

The identification of fragments of the Kavos subvariety of the Spedos variety in the Special Deposit South is an important step with interesting implications. It should be approached with caution, in view of the fragmentary nature of the material. As noted in Chapter 1, sculptures now designated as of the Kavos sub-variety were initially classed as products of the 'Goulandris Master' (Getz-Preziosi 1987, 102) or the 'Goulandris Sculptor' (Getz-Gentle 2001, 84–93). The reasons for the change of terminology are briefly discussed in Chapter 1, above. The identification of this interesting sub-variety is the result of the work of Pat Getz-Preziosi (now Getz-Gentle), and the different terminology followed here should not obscure the originality of her insight.

In her extensive discussion, Getz-Gentle suggests that a range of features of this sub-variety are characteristic, including the form of the head and also of the feet. However, the juxtaposition of several traits seems necessary to make a confident ascription to this sub-variety, and these are most clearly found associated together at the shoulders, torso and waist. Thus Sotirakopoulou *et al.* (2017) felt able to assign two torsos from the Special Deposit North, now in the Naxos Museum (NM2375: Getz-Gentle 2001, 166 no. 75; and NM4193) to the Kavos sub-variety, and suggest that a third (NM2374: Getz-Gentle 2001, 162 no. 14) is rather similar.

Here, from the Special Deposit South, one torso (1989: Fig. 3.2), one torso with waist (7000: Fig. 3.2) and one waist (1153: Fig. 3.4) are assigned to the Kavos sub-variety. Dr Getz-Gentle kindly inspected 7000 on her visit to the excavation workroom on Kouphonisi on 12 June 2007 and suggested that it was the work of the 'Goulandris Sculptor', noting the thin arms, the absence of an incision for the spinal column and the gently curved back. (Dr Gentle suggested in 2007 that three other pieces which she then inspected might be the work of the 'Goulandris Sculptor'. But her suggestion for them has not been followed here in the organization of the catalogue, since the characteristic traits are felt to be too few for a secure attribution to be established. These were the torso 644, Fig. 3.35, and the waist 4606, Fig. 3.54, both of which also lack an indication of the spine, and the pelvis **6610**, Fig. 3.64).

All the three pieces listed here as assigned to the Kavos sub-variety fulfil the diagnostic criterion of lacking the spinal incision, and two have the sloping shoulders, and two the relatively narrow arms, all features characteristic of the Kavos-sub-variety (i.e. 'Goulandris Sculptor').

The attribution of these three fragments to the Kavos sub-variety, along with those from the Special Deposit North (Sotirakopoulou *et al.* 2017), is a significant step. For hitherto it has been a striking feature of this specific form that all its traceable exemplars were without a secure context of discovery (with the exception of the figure from Grave 23 Aplomata in Naxos: Kontoleon 1972, pl. 136 α , which cannot at present be located in the Naxos Museum, and of NM2386 from the Special Deposit North, not selected by Soti-

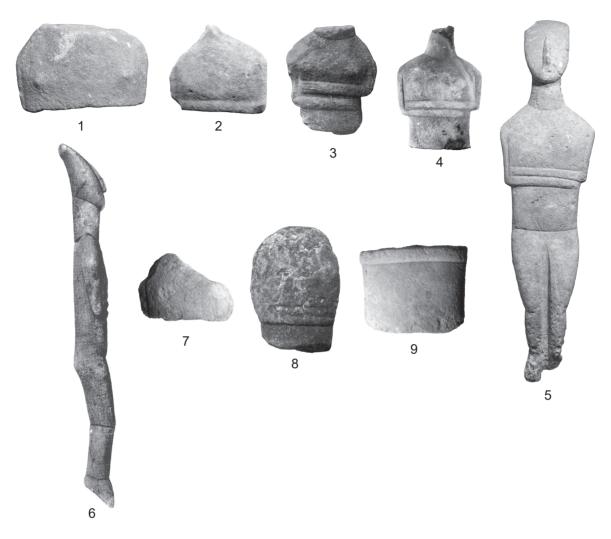


Figure 2.7. Figure fragments of the Kavos sub-variety from archaeological excavations or known before 1913. Not to scale. (1) Special Deposit North NM2375; (2) Special Deposit North NM4193; (3) BM 84.12-13.6; (4) EAM5390; (5) Bibliothèque Nationale 57.22; (6) Aplomata NM5800;(7) **1989**; (8) **7000**; (9) **1153**.

rakopoulou et al. as representative of the Kavos subvariety). It seemed a strange circumstance that more than 70 examples of this sub-variety could have come to light in illicit or uncontrolled excavations without a single example (other than the untraced piece from tomb 23 at Aplomata) emerging from an authorized and published excavation. Furthermore, no complete example could be documented as extant prior to 1914, although that position has now been rectified by the recognition by Getz-Gentle as the work of the 'Goulandris Sculptor' of a piece in the Bibliothèque Nationale in Paris acquired in 1859 (Caubet et al. 2013). Any doubts about the reality and authenticity of this sub-variety can therefore now be set to rest (which is not to exclude the possibility that some reported examples which have recently appeared on the market may not in fact be genuine).

Heads of the Spedos variety

The 44 heads of the Spedos variety, listed first in the catalogue, show a considerable range of forms: in general the face is tilted backward in relation to the neck. The face is rounded, and in that respect differs from the faces of the Dokathismata and Chalandriani varieties, where the face generally forms a flattish plane. The nose is always prominent and other facial features are not shown (unless by the application of paint). Sometimes at the top (or 'crown') of the head there is a flat surface (as in **6222** or **25114**) which is here termed the 'cranial plane'. The cranial plane may be roughly vertical, as in **6222** or much closer to the horizontal, as in **6275**.

Some heads widen in a regular way from chin to the crown (e.g. **966** or **25114**). This is a feature also typical of the Dokathismata and Chalandriani categories. These 'widening' heads are listed first among

the heads of the Spedos variety in the catalogue in Chapter 3. In the Spedos variety there are some heads whose greatest width is at or slightly below halfway up, and which proceed to narrow slightly but regularly towards the crown (e.g. 6205), although some are virtually parallel sided at the crown (e.g. 7154 or 1994). These 'narrowing' heads are listed next. The third class of head, like the preceding class, show some narrowing towards the crown but then the head widens slightly as the crown is reached: these are often described as 'lyre-shaped'. Fragments 79 (part of **45004**), **1478** and **1562** are examples of this. This lyre-shaped widening at the crown is probably to be understood as the representation of a mass of hair at the crown of the head. There follows in the catalogue a listing of the remaining heads, which are so fragmentary or so badly damaged that little more can be said about them. They are, of course, examples of the deliberate fragmentation to which the sculptures in the Special Deposit South were subjected. That these fragments cannot in general be joined together again with adjacent fragments or indeed with finds from elsewhere in the Deposit strongly suggests (as discussed in Volume II) that the fragmentation process took place elsewhere, before they were brought to Kavos. It should be noted that in just three instances the head fragments can be joined (624 and 1958 forming 40025; 79 and NM4150 forming 45004; 6288 and 6287 forming 40027). These three heads may have been broken after their original deposition, as certainly with 6287 and 6288 which were found close to each other.

Necks

Ten fragments of necks of the Spedos variety, detached both from head and torso, were recovered (Figs. 3.16 and 3.17). Each is of oblate cylindrical form. Some show a slight concavity at the middle of the neck. The simplicity of the shape makes it possible to confuse detached necks with the category of detached waists (see below) and it is possible that in one or two cases the fragment has been assigned to the wrong category. It should be noted that in many cases the head and neck are preserved together, so that the relatively small number of separate neck fragments listed here is not anomalous.

Torsos

Some 45 torsos of the Spedos variety, many very fragmentary, were recovered (Figs. 3.19 to 3.42). Just one (40010) could be joined to form an almost complete figure, lacking only the head and neck and the knees, lower legs and feet. It came from Trench F4, layer 2, somewhat outside the central area of the Special Deposit South, and was found on the surface. That it was not already broken into small fragments before being brought to Kavos suggests that it may have had a different personal history from that of most of the fragments recovered in the Deposit.

The torsos are in many cases broken in a clearly deliberate manner, and some show substantial subsequent weathering.

Waists

Several figures were broken above the arms. In others the break came below the arms (Figs. 3.43–3.57). In those cases, if the lower break came above the pelvis and pubic area, a very simple, almost cylindrical fragment results (as in **2207** or **1992**) which has a very abstract appearance when there is no incision indicating the spinal column (as in **4606**). In all, 21 waists are separately listed, but it should be noted that several of the fragments listed above under 'Torsos' also include the waist.

Some waists seem very tall and slender in relation to the body (e.g. 1992, part of 45003, 2020 and 25507). This is a feature of sculptures assigned by Getz-Gentle (2001, 166–7) to her 'Bastis Sculptor', although none in her list of his works is published as coming from a documented excavation (which is why this 'Sculptor' has not been regarded here as creating a valid sub-variety). It is, however, the case that Legaki (2017) has argued that two sculptures in the list compiled by Getz-Gentle, and now in the Naxos Museum (inventory numbers NM166 and NM168), were discovered at Phiontas in Naxos in 1947 in circumstances which can be reconstructed in such a way as to validate the find. Certainly one piece has several points of comparison with those cited by Getz-Gentle, and also with a figure which comes from the Galanis confiscation of 1964 (NM4674 of our measurement comparanda: Zapheiropoulou 1980, pl. 241). It may be that there are grounds here for accepting Legaki's argument that the Phiontas finds are well documented and so for defining a 'Phiontas sub-variety' of the Spedos variety, again following the insight, although not the nomenclature, of Getz-Gentle. But in any case these waist fragments indicated in the catalogue here are too fragmentary and indeed too simple to form the basis for an attribution to a specific sub-variety, with their slender form as the sole defining feature: for the recognition of a valid sub-variety must rest on the defining presence of more than a single trait.

Pelves

The pelvis (often with upper legs) is preserved in 35 instances (Figs. 3.58 to 3.70). It is clear that there is some variety in the treatment of the pubic area. Sometimes the top of the legs are indicated by clear incisions (as in **2141**, **6403**, **6619** and many other instances). Sometimes, however the pelvic area is shown by modelling with the absence of incision (as with **348** and perhaps **6610**). There are also clear differences in the treatment of the buttocks.

The pelvis area of two very small sculptures, originally 150 to 200 mm high, are also of note (Fig. 3.70: **20207** and **1484**). They have resemblances with pieces allegedly from Keros, published by Sotirako-poulou (2005, 157–8 and 171).

Legs

The fragments of legs of the Spedos variety are conspicuously numerous (Figs. 3.71 to 3.99): 45 are listed as upper legs and 58 pieces as lower legs, with 6 fragments where only the knees are conserved. There are also 14 cases where the fragment is so small that it is not clear whether the upper or lower leg is represented. The large numbers arise, of course, from the circumstance that often only the left or the right leg is seen in the fragment. The fragmentation was so thorough that conjoined (i.e. left with right) legs are only relatively rarely found. Each complete figure can produce a left and right upper and lower leg and thus can generate at least four leg fragments. So the 123 leg fragments recovered might be the product of the fragmentation of rather fewer than 123 complete figures. However, if one were seeking to calculate the Minimum Number of Individuals represented (on the analogy of osteological studies), one would not in any case start with the legs. From the study of the larger sculptures it seems clear that only one or two fragments from each originally complete figure were deposited in the Special Deposit South. For instance, the upper left leg fragment 872 is estimated to come from a sculpture originally 950 mm tall: it seems clear that no other parts of this sculpture were found in the Special Deposit South (for only the waist and pelvis forming **40003** were on a comparable scale).

The small number of cases in which the feet were left unbroken from the leg is noteworthy. It seems that in the fragmentation process the heads and the feet were the first to be detached, with very few exceptions. In the case of **40022** it has been possible to join the lower right leg with its foot, and this may be a fracture which occurred after deposition. In general it is notable how rarely it has been possible to join foot fragments with leg fragments: another indication that the process of fragmentation took place before the fragments were transported to Kavos.

Feet

The feet have a 'chunky' appearance, thickening markedly towards the heel, in contrast to the slimmer

form of the Dokathismata variety. Altogether 32 foot fragments are noted on the list, of which one (**25061**) came from a figure originally some 900 mm in height (Figs. 3.100 to 3.105). When the size distribution of the estimated original heights (when complete) of the figures represented by these foot fragments is considered, an interesting feature emerges. This is the notably high proportion of figures which were originally more than 500 mm in height (39.7 per cent of the foot fragments) compared with the total of sculptures originally greater than 500 mm in height in the entire Spedos variety assemblage, namely 15.5 per cent.

The possible reasons for this pattern are worth considering further. The in-trench sieving procedures used during the excavation (employing a 7 mm mesh for all soil) should have ensured that no fragments larger than that will have been lost in the recovery process (although a slender foot of maximum preserved length 20 mm can slip through a sieve of 7 mm mesh). It should also be noted that a significant proportion of the fragments recovered from the surface were collected during surface reconnaissances, which favour the larger fragments. Nonetheless, the most probable explanation for the differing patterns might be that those in the early bronze age who were selecting material for transportation to Keros after the local ritual fragmentation process may have overlooked or chosen to exclude fragments of sculptures which were less than 30 or 40 mm in total length. This is not a surprising result in itself, but it is interesting that it should emerge from our data recovery procedures.

The Dokathismata variety sculptures

The estimated original size range for the sculptures of Dokathismata variety is seen in Figure 2.8. This establishes that sculptures of the Dokathismata variety are generally smaller than those of the Spedos variety, with an average (mode) height when complete in the 201–250 mm range compared with a mode of 351–400 mm for the Spedos variety. Just three fragments, **539** (head), **2380** (pelvis) and **2106** (pelvis), would when complete have exceeded 450 mm in height.

In general it is not easy to recognize sub-varieties of the folded-arm figure when dealing only with fragmentary examples. However some torsos of the Dokathismata variety were of the form regarded by Getz-Preziosi (1984, 15) as the work of the 'Schuster Master'. As discussed in Chapter 1, it has now been possible to recognize some examples of this form from secure contexts, notably at Akrotiri on Thera, and also from early finds, and this has therefore been re-named the Akrotiri sub-variety (Sotirakopoulou *et al.* 2017), taking the find from Akrotiri as the namepiece. It has



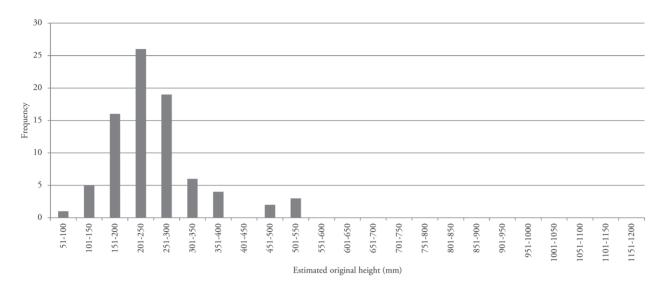


Figure 2.8. Estimated original size range for sculptures of Dokathismata variety from the Special Deposit South.



Figure 2.9. *Figurine fragments of the Akrotiri sub-variety from archaeological excavations or known before* 1913. Not to scale. (1) *Akrotiri AKR*2684; (2) *Special Deposit North NM*4186; (3) *Special Deposit North NM*4187; (4) *BM* 1854.12-18.23; (5) **40008**; (6) **20522**; (7) **832**; (8) **25038**; (9) **2115**.

been assigned to the Dokathismata variety, although some pieces do have resemblances also with the Spedos variety.

The Akrotiri sub-variety of the Dokathismata variety

The characteristics of the Akrotiri sub-variety, as originally recognized and defined (as the work of the 'Schuster Master') by Getz-Preziosi (1984, 15; 1987, 116), were set out in Chapter 1, above. The use of light modelling for the details (especially of the arms) rather than simply incision has been one important trait considered here, along with the curvature of the rather thin lower arms, often over an outwardly curving belly. The elbows are often prominent, protruding from the waist, and the shoulders are broad.

Just five examples, four torso fragments and one waist, have been provisionally recognized (Figs. 4.106 to 4.107). As noted later in the catalogue, several torsos with light modelling were considered, but in the end were felt to have too few distinguishing traits for inclusion.

One torso (2711) seemed so broad at the shoulders as possibly to derive from a double figure, until the joining neck fragment (1105) was found, making the composite Special Find 40008. One piece (20522), with an estimated total height when complete of 135 mm, is a notably small example of this sub-variety. The remaining pieces, 832, 25038 and 2115, although very fragmentary, seem to fit rather well in this subvariety.

Heads of the Dokathismata variety

The heads of the Dokathismata variety, 15 in number, are typically very flat and rather thin (e.g. **972**, **814** and **22350)**), and in some cases the nose is very prominent (Figs. 3.108 to 3.111). The crown of the head frequently terminates in a flat surface, here termed the cranial plane.

Traces of eyes have at times been provisionally claimed for seven of these heads (**351**, **6456**, **3111**, **972**, **814**, **1927** and **9833**): see Fig. 2.4. That they are sometimes asymmetrically placed could be the result of successive painting episodes. But these paint ghosts are not very clear in the finds from the Special Deposit South, and are only visible in a favourable light.

Necks

Five necks were recovered (Fig. 3.112). Some are long and slender and the attribution to the Dokathismata variety seems secure. Others are very fragmentary, but the circular section suggests attribution to the Dokathismata variety, since necks of the Spedos variety are often oval in section, with breadth definitely greater than thickness (from front to back).

Torsos

There are 27 preserved torsos (Fig. 3.113 to 4.118). The two name pieces for the Dokathismata variety (Rambach 2000, pl.2, 2 and 3; Tsountas 1898, pl. 10, 1) are notably flat, with very little plastic modelling, and the arms indicated mainly by incisions. Many of the torsos found in the Special Deposit South are very similar to these two name pieces, although often very fragmentary. Indeed, it would be possible to make a case for a sub-variety to be based specifically on the two name pieces from Tomb 14 at Dokathismata. This is a point which Tsountas (1898, 195) himself anticipated when he suggested that they might be made by the same craftsman. Some pieces closely resembling these two are **3134**, **2848** and **40006**.

Some, however, show light modelling, and in that respect stand closer to the Akrotiri sub-variety, and indeed some fragments might have been assigned to that sub-variety were more of the figure preserved (for example, **6624**).

Just a few, however, however show further distinguishing features: for example torso 25055, while at the front showing the treatment by incision which characterizes the two name pieces, at the back shows the buttocks by a small rectangular area in relief, a feature unusual in the Dokathismata variety. Indeed, close comparanda are rare; an unprovenanced piece from a private collection which Getz-Gentle (2001, pl. 46c) assigns to the Chalandriani variety has a very similar treatment. Interestingly both pieces have the unusual arrangement of left below right for the forearms. While great caution must be exercised with unprovenanced pieces, especially those recently appearing on the market, the comparison is interesting. The assignment of the comparative piece to the Chalandriani variety seems reasonable, although the sloping shoulders might make assignment to the Dokathismata variety appropriate. But in any case the two pieces are very similar, and remind us that for some of the very flat pieces the Chalandriani and Dokathismata varieties can have their similarities. That is particularly the case when only the torso is considered: in general the legs of the two varieties differ rather more clearly, narrowing pronouncedly in the Dokathismata variety towards the feet.

Pelves

There are six pieces for which the pelvis is separately preserved, often along with the upper legs (Fig. 3.119). These narrow towards the knees and down to the feet for the Dokathismata variety. When the legs are not preserved confusion with the Chalandriani variety is possible.

Chapter 2

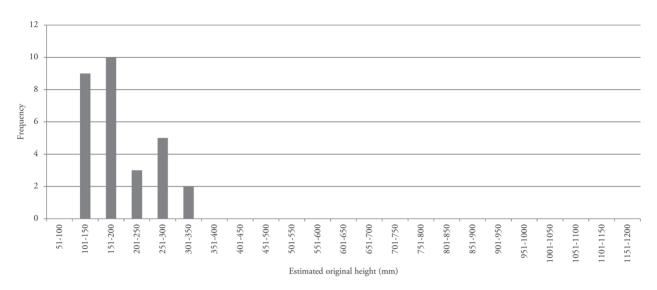


Figure 2.10. Estimated original size range for sculptures of the Chalandriani variety from the Special Deposit South.

Legs

Twelve leg fragments are preserved (Figs. 3.120 and 3.121). It is not always easy to assign a leg fragment to a specific variety. However, the absence of clearly separated legs is a general feature with the Dokathismata (and indeed the Chalandriani) varieties. This emphasizes that, if a saw was used, such use is a feature particularly of the Spedos variety, although it does begin with the Kapsala variety.

Feet

There are 10 fragments of feet of the Dokathismata variety (Figs.4.122 and 4.123). In all cases they are joined at the ankles, and sometimes along the length of the feet also (e.g. **40021**, **25066**). Usually, however, the feet were shown separately (e.g. **7266**, **59** and **1726**).

The Chalandriani variety sculptures

The estimated size range for sculptures in the Chalandriani variety is seen in Figure 2.10. This emphasizes that all the Chalandriani variety figures are relatively small, none here originally exceeding 350 mm in length, whereas the average (mode) height when complete is greater than 350 mm for the Spedos variety.

It should be noted that well-published comparanda for the Chalandriani variety from systematic excavations have until recently been very few, specifically the find from tomb 447 from the excavations of Tsountas at Chalandriani (Rambach 2000, pl. 63, 2; Zervos 1957, pl. 245). For comparative purposes this had to be supplemented by a piece of unknown provenance reputedly from Ios in the National Museum (EAM3196; Zervos 1957, pl. 245). The position has now been improved by the publication of two pieces from the earlier excavations of Stephanos at Chalandriani on Syros: EAM6164, height 156 mm (Papazoglou-Manioudaki 2017, fig. 21.10; Zervos 1957, pl. 249) and EAM6165, height 217 mm Papazoglou-Manioudaki 2017, fig. 21.11; Zervos 1957, pl. 288).

The Kea sub-variety of the Chalandriani variety

The criteria for recognizing the Kea sub-variety are set out in Chapter 1. Fortunately, the preponderant feature, the rolls of flesh shown in relief at the waist, is easily recognizable, even in small fragments, when that feature is preserved (Fig. 3.124). In the two cases from the Special Deposit South, **156** and **1155**, the two pieces conform well enough with the other features of the Chalandriani variety, being both notably flat. Estimation of the original heights, when complete, of these fragments has not been attempted, since no complete example of the Kea sub-variety has yet been recovered from a secure context (Fig. 2.11).

Heads of the Chalandriani variety

Twelve heads have been assigned to the Chalandriani variety, although owing to the fragmentary condition this is not clear in every case (Figs. 3.125 to 3.127). It is clear that on most of the heads the top of the nose is set very near the crown of the head (e.g. **6433**, part of **40005**). Comparable finds of heads of Chalandriani variety have been found in levels later than those of the early bronze age at Aghia Irini on Kea (Caskey 1971; 1974; Hershenson & Overbeck 2017).

In most cases the face forms a triangular plane and usually there is no chin. There is usually no cranial plane, although **2178** is an exception.

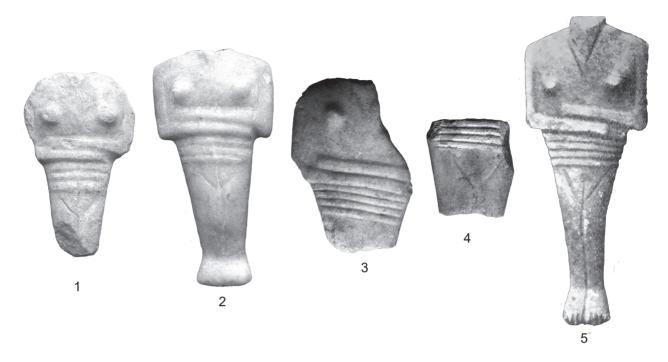


Figure 2.11. *Figurine fragments of the Kea sub-variety from archaeological excavations or known before 1913.* Not to *scale.* (1) *Kea CM355;* (2) *Kea CM383;* (3) **1155***;* (4) **156***;* (5) *BM A13.*

Necks

Two necks have been assigned to this variety, although the classification is not certain (Fig. 3.127).

Torsos

It is interesting that some of the torsos are from figures which were originally quite large, bigger that the two comparandum pieces, whose heights are 157 mm for the piece from tomb 447 at Chalandriani and 113 mm for the sculpture, EAM3106, from Ios. Some of the torsos are also exceptionally well preserved (Figs 4.128 to 4.131). The reconstructed torso **40004** had slightly sloping shoulders and a neck which, on its own, could be attributed to the Dokathismata variety. It may originally have been *c*. 300 mm in height. A particular detail, the manner in which the fingers are indicated by fine incision rather than by incised grooves, is of note (see Fig. 2.12).

Yet it is very neatly executed, as its horizontal section, as seen in the photograph at the lower break (Fig. 2.13), shows.



Figure 2.12. *Detail of torso* **2032** (*part of the joined* **40004**) *showing incisions of the fingers of the left hand. Not to scale.*

That general impression is echoed by torso **6614** (Fig. 3.130), where the failure of the lower arms to extend the whole way across the abdomen is clearly

Figure 2.13. *The section at the lower break of* **2032** (*part of* **40004**) *indicating the fine quality of the workmanship. Not to scale.*





Figure 2.14. *Detail of the hands of torso* **6614***. Not to scale.*

anomalous, and might have led to the assignment of this piece to the Keros variety (Fig. 2.14). Its original height is estimated at 210 mm, which is again large for the Chalandriani variety.

But again the fineness of the execution, seen from above (Fig. 2.15) allows it to be placed within the Chalandriani variety.

The very fragmentary **6826** (Fig. 3.131) is likewise large and reinforces the impression that there is a subgroup of the Chalandriani variety documented here which has not previously been recognized.

Pelves

Unfortunately no waist or pelvis of the Chalandriani variety is well preserved, which might be compared with the relatively large torso and waist from Aghia Irini on Kea (KI.306: Caskey 1971, no.1; Hershenson & Overbeck 2017, fig. 29.3). Indeed, the comparison suggests the possibility that some torsos, pelves, or upper legs assigned above to the Dokathismata variety might instead be of the Chalandriani variety.

Legs

Three leg fragments have been recovered (Fig. 3.132), two of them from small figures less than 150 mm in height. The third, **6414**, is of the larger, flat category.

Feet

There are four foot fragments (Fig. 3.132), in each case preserving at least part of both feet.

The sculptures of the Keros variety (formerly termed 'Post-Canonical')

As indicated in Chapter 1, several sculptural fragments, although seemingly inspired by the folded-arm type, did not fall within the already recognized varieties. Most of them had resemblances specifically with the Chalandriani variety, and initially they were classed within a category termed 'Chalandriani-related'. To have the place name 'Chalandriani' in the name of more than one classificatory unit seemed confusing, however, and so another name for the variety had to be selected and the term 'Keros variety' was chosen for this somewhat residual category. The size range of these figures when they were complete was similar to that for the sculptures of the Chalandriani variety (Fig. 2.16). Thirteen fragments (after joins undertaken) have been placed in this class (Figs 4.133 to 4.138).

Almost complete figure

The almost completely preserved figure 40002, once the component pieces (7410, 1446, and 1973) are joined, gives no indication of folded arms, indeed the arms do not seem to be represented at all (Fig. 3.133). However, the head in isolation, **7410**, although damaged, seems to have a blob nose reminiscent of some of the heads of the Chalandriani variety (Papazoglou-Manioudaki 2017, figs. 21.10, 21.11). The treatment of the flat legs also resembles fragments of the Chalandriani variety. It is not clear whether or not the feet are missing. The inferior quality of the marble opens the unusual possibility that this piece was made of marble from Keros, and thus perhaps locally. This, and the almost complete condition of the sculpture after the joins are made, makes it possible that this piece was broken at or near the Special Deposit South, in contrast to the other fragments which are believed to have been brought already broken from other islands.



Figure 2.15. *Torso* **6614**, *seen from above, indicating the regularity of the execution. Not to scale.*

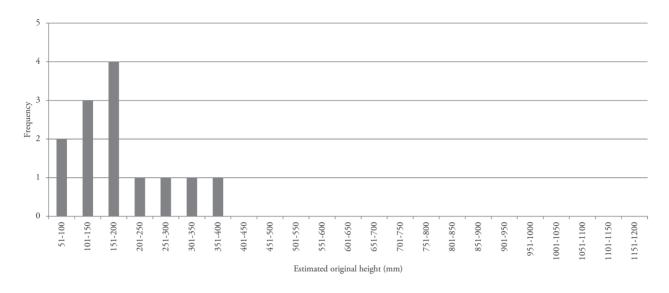


Figure 2.16. *Estimated original size range for sculptures of the Keros variety from the Special Deposit South.*

This is a very unusual piece. The crudity of the style might lead one to consider it of late date among the pieces from the Special Deposit South, and therefore made at the very end of the Cycladic early bronze age. On the other hand, the possibility that it was locally made, rather than being manufactured by one of the skilled craftsmen in the workshops on Naxos or elsewhere, may explain its anomalies through lack of skill rather than lateness of date.

Heads

Two large heads of the Keros variety are of note (**7409** and **278**), since the form of each is suggestive of the Chalandriani variety (Fig. 3.134). But if that were so, the complete figure would in each case probably be larger than any known example of that variety. Unfortunately both have suffered severely from weathering. In the case of **7409** the vertical arrangement at the back of the neck and head makes attribution to the Spedos variety very unlikely, so this is indeed an exceptional piece.

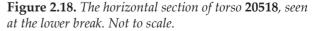
Large torso perhaps related to the so-called 'Hunter-Warrior' sculptures

The torso **20518** (Fig. 3.135) has points of similarity with torso **6614** (Fig 3.130) of the Chalandriani variety, which has a similarly anomalous positioning of the arms, which do not extend fully across the waist (Fig. 2.17). It is likewise large (in relation to the Chalandriani variety), with an original height estimate of 295 mm. It is likely that, as with torso **6614**, the fingers were originally indicated by fine incisions which, due to the weathering of the surface, have not been well preserved.



Figure 2.17. *The hands and lower arms of* **20518***. Not to scale.*





Seen in horizontal section, however, by means of a photograph taken at the lower break (Fig. 2.18), it is much thicker and lacks the fineness of execution of the two large torsos of the Chalandriani variety from the Special Deposit South (**2032**, part of **40004**, and **6614**) illustrated above (Figs. 2.12 and 3.14). This supports its assignment to the Keros variety.



Figure 2.19. *Incisions, perhaps representing a baldric, on torso* **20518***. Not to scale.*

The torso 20518 is important since it is the first such figure with an unusual arm arrangement, perhaps related to the Chalandriani variety, to have come from a controlled excavation. None of the figures with unusual arm positions attributed to the 'Goulandris Hunter-Warrior Master' by Getz-Preziosi (1987, 68) has a secure context. The same is true of the folded-arm figures in her overlapping category of male figures (Getz-Preziosi 1981). Reference should be made here, however, to the drawing made around 1850 by George Scharf (Fitton 1984) which depicts a male figure and another female figure in a style which has been termed 'post-canonical'. The early date and quality of the drawing seem to ensure the authenticity of these pieces, although their location is no longer known and their provenance is not recorded. Their recognition as authentic also makes much more plausible the authenticity of two analogous pieces in the N.P. Goulandris Museum of Early Cycladic Art (Doumas 1968, nos. 308 and 312), as Fitton has argued.

The possible relevance of torso **20518** to these pieces arises mainly from the incised parallel lines which are still visible on the torso of the figure, running roughly from the right shoulder towards the waist, although the surface is not at all well preserved (Fig. 2.19).

These incisions might be interpreted as representing a shoulder strap or baldric, just as Getz-Preziosi (1979, 89) argued for a folded-arm figure of Chalandriani variety acquired before 1908 by the Ashmolean Museum (AE 456: Sherratt 2000, pl. 200). The prominent breasts on torso **20518** make clear, however, that this is indeed a female figure which might not be expected to wear a baldric, although in the case of the Ashmolean figure Getz-Preziosi (1979, 92–3) has an ingenious explanation to overcome the difficulty.

But here it is clear that the incisions do not traverse the right breast of the figure, so that the recognition of the baldric is uncertain.

Other torsos

The standing figure **40001**, made up of the torso **2153** and the legs **6015** (Fig. 3.136), is a rather enigmatic piece, which at first sign might be an early sculpture, perhaps close to the Louros type. Indeed, although breasts seem to be represented, it is not clear that the arms are shown, although a left arm can be imagined. Seen in profile this piece does seem related to the folded-arm figures. But ultimately it is the treatment of the legs which leads to its assignment to the 'post-canonical' Keros variety category. The feet appear to be damaged or missing, but the treatment of the legs seems to resemble that seen in some other sculptures of the Keros variety, with broad flat surfaces separated by a broad groove. The treatment seems rather careless.

Two further sculptures, **25021** (Fig. 3.136) and **2413** (Fig. 3.137), have elongated pubic areas, for which an approximate (but less elongated) parallel can be found in a torso of Chalandriani variety from Aghia Irini on Kea (Caskey 1971, pl.17, 1; Hershenson & Overbeck 2017, fig. 29.3). This elongation is particularly marked with **25021**, where the rather crude treatment and the completely flat back indicate an incompetently made piece, which could well be of late date. A further torso, **20175**, has a notably small pubic triangle.

Feet

The feet listed here assigned to the Keros variety seem (Fig. 3.138) to be divisible into three sub-groups or sub-varieties.

The first of these sub-groups, represented by 6284 and 1302, have feet which broaden at the toes, which of course lack the slender elegance of the Dokathismata variety. But they differ also from the feet of the Chalandriani variety, as exemplified by the sculpture from tomb 447 at Chalandriani (Rambach 2000, pl. 63.2), where the toes are not separately indicated with any clarity. They do have resemblances with the feet of the Kea sub-variety (where these are preserved), as in the sculpture K9.55 (CM383) from Aghia Irini in Kea (Caskey 1971, 16, no.7; Renfrew & Boyd 2017a, fig. 26.12, 2; Wilson 2017, fig. 9.1), and may be compared with those of the sculpture acquired by the British Museum in 1874 (BM A 13: Renfrew & Boyd 2017a, fig. 26.12, 5), although these are so slender as to be closer to the Dokathismata variety. The widening feet compare also with a further piece in the British Museum, acquired in 1875 (A 14:

Pryce 1928, 8, fig.4; Renfrew 1969, plate 8, c), with the anomalous position of the lower left arm which is raised toward the right breast. The toes of **1302** have notably long incisions.

The second sub-group is represented here by **2303**, with its markedly splaying and heavily incised toes, which compare strikingly with a piece from the Special Deposit North (Renfrew 2006, fig. 7.7 and SF 298). A piece from the 'Keros hoard' and so without secure provenance (Sotirakopoulou 2005, 170, no. 139) has a similarly clumsy appearance, as Dr Pat Gentle has kindly commented (pers. comm., 25 July 2008), with the observation that a fragment in the Apeiranthos Museum, no. 949, has similar feet, although the pubic triangle is smaller and deeper. All of these may be said to be 'Chalandriani-related'. That they are later than the sculptures of the Chalandriani variety itself has not been documented stratigraphically.

The third sub-group, with **20202** and **20103** (Fig. 3.138) is very different, lacking entirely any incisions at the toes. Indeed in **20103** the feet do not appear to be separately differentiated.

The differences between these three sub-groups seem clear enough. But there are too few examples in each to make any broader claims, particularly since in the examples from the Special Deposit South only the feet are preserved. With such fragmentary material it would be wrong to make wider claims. The difficulty is that none of the comparanda for the Keros variety sculptures, as defined here, comes from a documented archaeological context.

This body of material is, however, of considerable importance, since the authenticity of every piece published here in the catalogue is assured. The same can reasonably be said for the comparative pieces cited, all documented prior to 1913. The Keros variety thus securely documents the existence of a range of material which has hitherto lacked any secure archaeological context.

Unfinished folded-arm sculptures

Several sculptures from the Special Deposit South appear to be unfinished, perhaps of the folded-arm type (Figs. 3.139 to 3.141). Exceptionally, one of these (**45001**), formed of a piece from the Special Deposit South (**2811**) which joins with a head in the Naxos Museum (NM4163) from Kavos, makes a complete, although unfinished, figure after the join has been effected. It may be imagined on account of the sloping shoulders and tapering form that this piece was intended to finish up as a small folded-arm figure of the Dokathismata variety, although this must remain hypothetical. Another piece (**20121**, Fig. 3.140), now lacking head and feet, may, in view of its outline, have been intended to form a folded-arm figure of the Spedos variety.

One unfinished sculpture (**1988**, Fig. 3.141) has two parallel lines, perhaps indicating where the arms were later to be represented. It is interesting to compare this piece with those which have been produced in recent experimental attempts to manufacture 'Early Cycladic' sculptures (Papadatos & Venieris 2017, figs. 34.5–34.9).

The presence of eight unfinished sculptures in the Special Deposit South, only one restorable to a complete state, is not easy to explain. There is no evidence to suggest that folded-arm sculptures were actually made at this location. For instance, there is no manufacturing debris of marble which, had it been present, would certainly have been recovered during the water-sieving process. The marble for these sculptures is not itself from Keros. Yet these unfinished pieces can hardly have been used in ritual practices in their islands of origin. It is therefore unexpected that they should be found among the other fragmentary sculptures in the special deposit.

Their discovery gives rise to interesting questions. The interpretation offered here for the phenomenon of breakage seen in the Special Deposit South is that the sculptures found here were deliberately broken when they were no longer required in the villages or settlements of their primary function on other Cycladic islands when they went out of ritual use. The same explanation can scarcely apply to the inclusion of fragments of sculptures which were still unfinished at the time of breakage, unless these were employed in the same ritual practices as their finished counterparts. This seems inherently unlikely. So the discovery of these unfinished sculptures offers an unsolved problem. It is possible, perhaps, that in the case of these pieces the breakage was not deliberate, and took place accidentally during the process of production. But in that case why were they brought to Kavos?

Fragmentary and indeterminate folded-arm sculptures

In the case of 19 fragments of the folded-arm type it was not possible to assign the fragment to a specific variety (Figs. 3.142 to 3.144). One head, **6180.2**, is possibly of the Chalandriani variety. Seven of these were small neck fragments, which might have been of the Dokathismata variety, but where the Spedos and Chalandriani varieties could not be excluded. There were several unassigned breast fragments and a few unattributed legs. This is a residual group of little interest.



Figure 2.20. Torso of male figure 4605 with the Keros flautist (EAM3910). Not to scale.

Special type: action sculptures and compositions of figures

In this category are gathered three fragments which do not fall in the preceding categories (Figs. 3.145, 3.146). They are not folded-arm figurines, nor can they be classed as schematic. One, 4605, seems to be a male figure of a form related to that of the well-known flautist from Keros. There is a head, 2194, whose closest parallel seems to be with the seated harpist form. One, 6307, might be part of a double figure. These, although fragmentary, can be compared with known forms which are part of the repertoire associated with the canonical folded-arm figures, although they are not of the folded-arm type. They appear to belong with the musicians (harpist and flautist) which are represented as undertaking an activity, and the paired sculptures. For that reason they have been termed here 'action sculptures' (as in Volume II) or sculptures of Special type.

The torso of a male figure, **4605**, although poorly preserved, may be compared with the well-known flautist in Athens (EAM3910: Zervos 1957, pl. 302), published by Koehler in 1884 as from Keros (Fig.

2.20). A very similar but unprovenanced piece, reportedly from the 'Keros Hoard', is published by Sotirakopoulou (2005, 174, no. 147). Although no other male figures have been recovered from the Special Deposit South, the finds of marble bases in the Special Deposit North on which such figures may have stood (Lambrinoudakis 1990, 104, no. 99; Zapheiropoulou 1968b, 99, figs. 2-4) makes the identification very plausible.

A head with a very pronounced nose, set low on the face, **2194**, might possibly be from a seated harpist, or other seated figurine, although this is uncertain (Fig. 2.21). It may be compared with the harpist, reported in 1884 as from Keros (EAM3908: Koehler 1884; Zervos 1957, pl. 333-4). Other harpists in the Badisches Landesmuseum in Karlsruhe, acquired by 1850 (Thimme 1976, nos. 254, 255; Thimme & Getz-Preziosi 1977, nos. 254, 255), likewise have prominent noses. So do some of the seated figures from Aplomata in Naxos (NM5467 and NM5468: Doumas & Lambrinoudakis 2017, figs. 15.19–15.21). But while the prominence and position of the nose is suggestive, the possible identification of this piece as part of a seated figurine on the basis of the head alone is merely a hypothesis.



Figure 2.21. The head 2194 compared with the head of the Keros harpist (EAM3908). Not to scale.

The identification of a torso, 6307 (Fig. 3.146), as part of a double figure, is also hypothetical. The left shoulder extends so far to the left that the suggestion seems probable, but no part of the suggested left-hand figure is preserved. But a comparable, if more robustly modelled, torso fragment from Aplomata (NM6908: Doumas & Lambrinoudakis 2017, fig. 15.29; Lambrinoudakis 1990, 104, fig. 98), and another in the British Museum since 1884 (Bent 1884, 51, fig. 9; Pryce 1928, 13 fig. 12 no. A 34) perhaps makes the suggestion plausible, as do the finds of marble bases for standing figures in the Special Deposit North (Zapheiropoulou 1968b). But there is no indication on the back of this piece of the right arm of the counterpart figure, as would have been expected. It should be noted also that the two double figures cited are of the Spedos variety, while this torso fragment seems closer to the Dokathismata variety. However, an unprovenanced piece in the Goulandris Museum (Doumas 1968, 184, no. 330) is more slender and might be a closer comparison to this find from the Special Deposit South. But the lack of indication of an arm on the back of this piece makes its potential status as a double figure seem very doubtful.

Sculptures of other type

Several fragments, unfortunately not well preserved, do not fall within the preceding categories (Figs. 3.147 and 4.148). They are not schematic sculptures of the Apeiranthos variety, nor are they of the folded-arm form. Nor are they in categories which are related to the folded-arm sculptures, such as the 'action sculptures' just discussed, or the Keros variety sculptures, which generally seem related to those of the Chalandriani variety.

The four heads included here in the catalogue seem not to be of folded-arm figures. Yet although they can be compared with those of sculptures of the Plastiras or Louros type, the comparison is not very close. So there is no reason to think them exceptional on chronological grounds. There are two torsos which seem to be armless. Finally, the fragment **7151** (Fig. 3.158) might conceivably be interpreted as part of the throne of a seated figure, comparable to some of those in the Aplomata cemetery in Naxos. But the identification has not been felt sufficiently secure to place this fragment among the 'action sculptures'.

The schematic sculptures

The schematic sculptures from the Special Deposit South comprise three substantially complete figures and 37 heads or torsos (Figs. 3.149 to 3.157). They are, with very few exceptions, of what has been termed the Apeiranthos type or variety (Renfrew 1969, 14), although none is actually documented as coming from Apeiranthos village itself. Of the 35 sculptures of the Apeiranthos variety from the Special Deposit South, 26 may be assigned to the Dhaskalio sub-variety (Volume I, chapter 24). There are also five fragmentary pieces about which rather little can be said.

Together these 35 fragmentary schematic sculptures of the Apeiranthos variety add significantly to the 36 such figurines found in the settlement at Skarkos on Ios (Marthari 2017) and the 10 from the settlement at Dhaskalio (Volume I, chapter 24). In the first place those from the Special Deposit South have nearly all been broken, presumably on purpose. The size range is limited: the largest will have been about 120 mm in height when complete, and the smallest about 50 mm. Just one head (**1802**) may have belonged to a figure up to 170 mm in height, but that is an estimate made on the size of the head alone, and this was one of the few pieces that definitely was not of the Dhaskalio sub-variety.

The three complete figurines are quite small (less than 89 mm in height) and certainly of the Dhaskalio sub-variety. One, **40007**, was broken at the neck, and

head and body were found in the same trench, Trench D3, so the break may have happened there. The others, **637** and **7152**, are among the very few sculptures to be found complete in the Special Deposit South: both are small (less than 60 mm) and both slightly damaged. So they need not contradict the general observation that the marble objects in the Special Deposit south were in general systematically broken before deposition, and indeed before being brought to Kavos.

In all, 26 pieces could be assigned to the Dhaskalio sub-variety. One of these (**710**: Fig. 3.153) was rather plump and another (**20748**: Fig. 3.154) exceptionally so. In general, however, the pieces of Dhaskalio subvariety conform reasonably well to the comparable pieces found on the settlement of Dhaskalio itself.

The preponderance of the Dhaskalio sub-variety at the Special Deposit South is not so marked as on the settlement at Dhaskalio itself, where the great majority of the figures (9 out of 10) were of this specific subvariety. The proportion was less among the sculptural finds at Skarkos on Ios.

Just eight schematic pieces were clearly not of the Dhaskalio sub-variety, while clearly of the Apeiranthos variety. The two heads, **25037** (Fig. 3.155) and **7005** (Fig. 3.156) were broader, and compared with examples from Syros (e.g. Papazoglou-Manioudaki 2017, fig. 21.14). The schematic figurines of uncertain variety (Fig. 3.157) are minor pieces, and do not change the general position that the schematic figurines in the Special Deposit South can be assigned to the Apeiranthos variety.

An interesting feature is the presence of both schematic and canonical folded-arm sculptures in the Special Deposits at Kavos, whereas the folded-arm type is entirely absent in the neighbouring settlement at Dhaskalio (and is represented by just two heads at Skarkos). Yet in the Cycladic cemeteries, notably at Chalandriani on Syros and Spedos on Naxos, both schematic and folded-arm sculptures do occur, but again with the folded-arm form in the majority. The conclusion would seem to be that schematic figurines of the Apeiranthos variety were routinely used at different locations (perhaps in different domestic contexts) in the Early Cycladic settlements, as documented by Skarkos and Dhaskalio. Yet the archaeological record at these two settlement sites suggests that folded-arm figurines were not used in the same way, although the finds of fragments of folded-arm figurines made at Aghia Irini on Kea and at Phylakopi on Melos should certainly be noted. These patterns seem clear, and must be of importance, but a satisfactory interpretation for them has not yet been forthcoming.

In general the schematic figurines at Kavos, like those elsewhere in the Cyclades at this time, show a rather restricted range of forms. The Dhaskalio subvariety simply represents a sub-set of the Apeiranthos variety. There is a much greater range of forms among the schematic figurines in the preceding cultural phase, the Grotta-Pelos culture (Early Cycladic I).

The chronology of the Special Deposit South and the development of the varieties

The first obvious feature of the entire assemblage at the Special Deposit South is the absence of sculptures of the Kapsala variety of the folded-arm type. Two fragments of feet, **1304** and **25026**, have been classed here as 'Kapsala or Spedos variety' and placed at the beginning of the sculptures of the Spedos variety. In their very fragmentary state they are not considered as a secure documentation that sculptures of the Kapsala variety are indeed present in the assemblage.

Already, in 1969, when the varieties of the folded-arm figure were first recognized and defined, the chronological priority of the Kapsala variety was regarded as likely, mainly on typological grounds (Renfrew 1969, 21). That the folded-arm figure was a feature of the Keros-Syros culture ('Early Cycladic II') was there established on the grounds of sound associations of artefacts in stratified archaeological contexts. It was clear also that the sculptures of Plastiras and Louros type could be demonstrated to be earlier and associated with the Grotta-Pelos culture (including the transitional Kampos phase) on a similar basis. But the status of the Kapsala variety as earlier than the Spedos variety could not at that point be established other than by typological arguments.

Those arguments were greatly strengthened by the discovery at Akrotiri on Thera of a group of sculptures in Cenotaph Square which could clearly be regarded as transitional between the Plastiras and folded-arm types (Doumas 2017a; Sotirakopoulou 1998), even though their ultimate context at Akrotiri was a later bronze age one. The chronological position of folded-arm sculptures of the Kapsala variety is also now becoming clearer with the publication in detail of the excavations at Aplomata on Naxos (Doumas & Lambrinoudakis 2017). There the presence together in Grave 13 of folded-arm figures of the Kapsala and Spedos varieties, as well as seated figures, and the absence of any folded-arm figures of the Dokathismata and Chalandriani varieties, may be significant. Indeed sculptures of the Dokathismata and Chalandriani varieties are entirely absent from the Aplomata cemetery.

The absence of any confirmed Kapsala variety sculptures from the Special Deposit South may thus be taken as consistent with these observations. The sculptures of the Kapsala variety may be taken as representing an early phase in the development of the folded-arm type, which seems to have gone out of use before the depositional activities in the Special Deposit South began.

A second important feature of the Special Deposit South assemblage is the presence of figures of the Keros variety, found here for the first time in secure archaeological contexts. Their absence from the known Early Cycladic cemeteries could be taken as an indication that these cemeteries went out of use before the Keros variety figurines were produced. Their presence at Kavos could be taken as an indication that the depositional practices at Kavos continued during a phase later in date than the use of these documented Early Cycladic cemeteries. This is of course in agreement with the continuing use of the Special Deposit South during the period designated Dhaskalio Phase C (Volume IV). Some pottery from that time, although not much, is found in the Special Deposit South assemblage (see Volume II, chapter 5). It is possible that the Keros variety sculpture fragments were deposited at

that time, although this has not been demonstrated stratigraphically.

It should be noted that a number of these conclusions support some of the earlier observations made by Thimme (1976) and by Getz-Preziosi (Getz-Preziosi 1987; Thimme & Getz-Preziosi 1977). Only now, however, is it possible to clarify the matter using archaeological contexts and associations without relying upon typological assumptions. As it turns out, some of those assumptions are supported by the excavation evidence. On the other hand, it must be acknowledged that beyond these rather limited arguments, there is at present no reliable way of establishing the chronological relationships between the different varieties of the folded-arm figure.

A further point of interest is the presence of schematic as well as folded-arm sculptures in the Special Deposit South. That reflects the position seen in the Cycladic cemeteries. But it contrasts markedly with the absence of folded-arm sculptures from the settlement at Dhaskalio, and their rarity at the settlement at Skarkos on Ios.

Appendix

On the Procedure for Estimating the Original Size of a Sculpture from the Preserved Fragment

To undertake this task it is necessary first to decide from which part of the anatomy the fragment comes. This is sometimes obvious, but care needs sometimes to be exercised in distinguishing between an upper leg (thigh) and a lower leg (calf), and again, with a leg, the front from the back.

The second stage is to determine which variety of the canonical folded-arm figurine is represented, by comparison with the known examples of the Kapsala, Spedos, Dokathismata and Chalandriani varieties. Usually the fragment will correspond with one of these. But in just a few instances that proves not to be the case and the task then becomes more difficult, for then no usable comparandum can be found.

The third task is to choose a suitable illustrated comparandum of the appropriate variety from a published Early Cycladic excavation which is both well preserved and substantially complete. There is no shortage of choice for sculptures of the Spedos variety. The two examples from grave 10 at the type site on Naxos (Papathanasopoulos 1962, pl. 46) were often found convenient. For the Dokathismata variety, the two examples from grave 14 at Dokathismata on Amorgos (Tsountas 1898, pl. 10, 1) offered a good basis. For the Chalandriani variety, the example from grave 447 at Chalandriani on Syros, illustrated by Rambach (2000, pl. 63), was the first option. Other excavated examples were sometimes used as comparanda (and these are noted in the catalogue, below). Occasionally, with the Spedos variety, a more suitable and convenient example could be found in the group confiscated in Naxos in 1964 and published by Zapheiropoulou (1978), since these were readily visible in the Naxos Museum. They were confiscated in the year 1964 (from Ioannis Galanis, whose lands in Naxos lay in the southeast, between Kleidos and Kalandos). But these lack a secure findspot and their authenticity, although likely, is not guaranteed.

The procedure is then a relatively simple one. It is first to measure on the fragment under study, the specific length, X, of an anatomical dimension (e.g. maximum width at pelvis) which can be unequivocally recognized in the photograph or drawing available for the chosen comparandum. Then the comparable anatomical dimension, Y, is measured in the scale drawing or photograph of the comparandum. Then, third, the total height, Z, in the drawing or photo, of the comparandum piece is measured. (It is not in fact necessary that the height of the comparandum piece be accurately known, although it may be wise to choose a comparandum that is broadly comparable in scale with the fragment under study). In effect this is just a rather crude procedure for 'scaling up' from the fragment to the original total height, on the assumption that the proportions of the fragmentary sculpture were essentially the same as those in the comparandum. The estimated original height of the complete figure from which the fragment is derived may then be calculated by the formula:

Estimated height =
$$\frac{X \times Z}{Y}$$

The accuracy of the procedure is dependent, of course, upon the validity of the comparison as depicted in the illustration available for the comparandum piece, and also, if a photograph is used, on the properties of the camera lens and the orthogonal position of the piece in the photograph. We estimate that in many cases a standard error (standard deviation) of the order of plus or minus 5 per cent may apply, so that estimates should be valid to within about 10 per cent. While this procedure offers only limited accuracy, it should allow a good quantitative estimate of the size ranges of the original sculptures represented in the Special Deposit South, prior to their fragmentation. It has been applied to the sculptures described in the catalogue which forms Chapter 3.