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The Fabrics of the Ceramics at Kavos

Hilditch, J.R.

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Chapter 6

The Ceramic Fabrics of the Special Deposit South

Jill Hilditch

Introduction

This chapter presents an extensive macroscopic study of the ceramics excavated within the Special Deposit South at Kavos, with a brief discussion of the relevant petrographic and neutron activation analyses, which will be published in more detail in Volume III. Volume III will also contain a detailed comparison with the 1987–88 investigations at the Special Deposit North (Broodbank 2007; Hilditch 2007). The macroscopic study of the Dhaskalio assemblage is presented in Volume I.

In general, the ceramic material recovered from the Special Deposit South was extremely fragmentary, with poor preservation of diagnostic features and surface treatments, in stark contrast to the assemblage from Dhaskalio. In addition, the contexts of the ceramic material from Kavos reveal a turbulent history, with many sherds deliberately broken before deposition and subsequently disturbed by successive depositional events and geomorphological processes. A full discussion of the typology, wares and find contexts of the Special Deposit South assemblage is given by Sotirakopoulou in Volume V. The fabric study of the Special Deposit South at Kavos draws heavily upon the macroscopic work at the Special Deposit North by Broodbank (2007). Where relevant, the original macroscopic groups have been maintained within the analysis of the 2006–08 assemblage from the Special Deposit South. An approximate figure for the medium *vs* coarse wares is given at the start of each macroscopic group description, though these will be refined in the petrographic study that follows.

Macroscopic analysis

As a brief introduction to the macroscopic descriptions, it is worth commenting upon the considerable range of different groups that were classified within the Special Deposit South material. In total there are 32 macroscopic groups (or fabrics): 21 for the

coarse and medium wares, which include sub-groups based upon composition, and 11 groups for the fine wares (see Table 6.1 for a full comparison of the correlations with Broodbank's groups for the Special Deposit North). These groupings and sub-groupings are based upon clay colour, degree of firing (high, medium, low), as well as suggested inclusion composition (colour and habit) and textural (shape, size and frequency) variation, which can offer significant insights into provenance and technological processes, even at this preliminary analytical stage. Most of the macroscopic groups identified within the Special Deposit South assemblage correlate to groups identified in the analysis of the Special Deposit North (Broodbank 2007), which were largely confirmed in their suggested provenance by petrographic analysis (Hilditch 2007).

The Special Deposit South trench material

Unlike the excellent preservation of the Dhaskalio material, the Special Deposit South assemblage is entirely sherd material, mostly with poorly preserved surface treatments. No clear phasing of activity has been identified within the Special Deposit South, owing to the complex stratigraphy as well as subsequent human and geomorphological disturbances. However, Sotirakopoulou has identified diagnostic shapes of the three main phases identified at Dhaskalio within the Special Deposit South assemblage—sauceboats and conical-necked jars with stamped and incised decoration characteristic of Phase A (early Keros-Syros, 2750–2550 BC), various shapes associated with the appearance of the Kastri Group of Phase B (2550–2400 BC), and later early bronze age (2400–2000/1900 BC) shapes, partly corresponding to Phase C, which include cups with studs and vessels with painted dark-on-light or white-on-dark decoration. Unfortunately, due to the depositional contexts and preservation, the quantities of pottery within each phase remain a matter of speculation (see appendix

Table 6.1. Comparison of macroscopic groupings between the 1987–88 material from the Special Deposit North and the Special Deposit South assemblage. *This group was only found within the Dhaskalio assemblage.

Macroscopic Groups at the Special Deposit South	Special Deposit North 1987–88 (Broodbank)
<i>Coarse/Medium Wares</i>	
Quartz	Quartz
Sandy	Sandy
Dark Phyllite	Blue Schist
Red Phyllite	Red Schist
Micaceous Quartz	Micaceous Quartz
Micaceous Schist	Micaceous Other
Calcite	Marble
Talc	Talc
NONE	Crystalline
Dark Volcanic	Biotite
Non-micaceous Phyllite-Schist	NONE
Pale Volcanic	NONE
Granite	NONE
Pale Buff with Dark Temper*	NONE
<i>Fine wares</i>	
Fine Buff	Fine Buff
Fine Dark Buff-Grey Micaceous	Fine Dark Buff Micaceous
Fine Mottled	Fine Mottled
Fine Grey	VARIANT of Fine Grey
Fine Dark Grey	NONE
Fine Hard Blue-Grey	VARIANT of Fine Hard Grey
Fine Orange	Fine Orange
Fine Red-Brown/Brown	NONE
Fine Dark Green-Brown Micaceous	NONE
Fine Pink	Fine Residual—Pink Variant
Fine White	Fine White

to Chapter 5) and cannot, at this point, provide a fine-grained chronological resolution for the Special Deposit South material.

Two trenches from the Special Deposit South were selected for detailed macroscopic analysis, D1 and D3, with both trenches containing diagnostic sherds corresponding to a range of vessel shapes from across all three phases. Trench D1 contained 562 diagnostic sherds, with Trench D3 containing 1912 diagnostic sherds. The fragmentary nature of the deposition patterns within the Special Deposit South are highlighted through the number of cross-trench joins between old breakages of vessels, i.e. sherds broken before deposition—Trenches D1 and D3 contain

sherds with joining sherds in Trenches B1, B4, C1, C4, D4, F2, F3, J1, M3 and RA (Volume V). Due to time constraints, only diagnostic sherds were studied by fabric, and the macroscopic study was limited to the first 12 layers of Trench D3, which contained 1912 from a total of 2205 diagnostic sherds (86.7 per cent coverage). In addition, direct comparison between the Special Deposit South and Dhaskalio *with respect to relative percentages of macroscopic fabrics* must be treated with caution, as the Special Deposit South is quantified by sherd and the Dhaskalio assemblage by vessel. Trench D1 contained 2550 non-diagnostic sherds, while Trench D3 contained 6837 non-diagnostic sherds (layers 1–12). Time constraints meant that these sherds were not included within the macroscopic analysis.

As no detailed phasing for individual layers can be identified within the trench material, Table 6.2 presents the total relative percentages for macroscopic fabrics within each trench studied, with Table 6.3 showing the most to least frequent fabrics within each trench.

As Table 6.2 shows, the percentage of fine ware fabrics within the Special Deposit South material is significant, forming just over 50 per cent of the studied sample in both trenches (51.2 per cent in D1 and 53.7 per cent in D3). This is in stark contrast to the Dhaskalio material, where fine wares formed only 2.8 per cent of the Phase A sample and only marginally more in Phases B and C, with 4.2 per cent and 4.8 per cent respectively. This difference in coarseness of ceramic fabrics is perhaps the most startling contrast between the two sites. Moving beyond typology for a moment and considering the purely technological choice of producing a fine ware, these vessels are generally perceived as relatively high value or prestige objects within the Early Cyclades, due to the effort required for their manufacture from most locally available clay sources, or their transport from areas beyond the islands. Although the range of geological facies within the Cyclades is highly varied, naturally occurring deposits suitable for potting without fining procedures (such as crushing, sieving, levigation) are relatively rare, with the Neogene sediments of the Kouphonisia forming a notable exception (IGME 1994). Based upon this technological perspective, the deliberately fragmented and deposited Special Deposit South material can be interpreted as having a significantly greater ‘prestigious character’ overall than the Dhaskalio assemblage.

The typological profile of the two sites adds weight to this interpretation, as the Special Deposit South is dominated by sauceboats and conical-necked jars (both plain and with incised or stamped and incised decoration), vessels thought to hold a ritual or special cultural value. As Sotirakopoulou’s study

Table 6.2. Frequency and relative percentage of macroscopic fabrics by sherd in Trenches D1 and D3.

SDS sherd counts			D1		D3		TOTAL	%
			Total	%	Total	%		
Coarse/medium fabrics	Quartz	V1A	12	2.1	32	1.7	44	1.8
		V1B	17	3.1	22	1.2	39	1.6
	Sandy	V2A	0	0	12	0.6	12	0.5
		V2B	25	4.4	180	9.4	205	8.3
		V2C	68	12.1	233	12.2	301	12.2
	Dark Phyllite	V3A	3	0.5	5	0.3	8	0.3
		V3B	12	2.1	4	0.2	16	0.6
	Red Phyllite	V4	3	0.5	1	0.05	4	0.2
	Micaceous Quartz	V5	27	4.8	86	4.5	113	4.6
	Micaceous Schist	V6A	4	0.7	6	0.3	10	0.4
		V6B	4	0.7	2	0.1	6	0.2
		V6C	8	1.4	83	4.3	91	3.7
		V6D	0	0	6	0.3	6	0.2
	Calcite	V7A	42	7.5	15	0.8	57	2.3
		V7B	38	6.8	153	8	191	7.7
		V7C	6	1	37	1.9	43	1.7
Talc	V8	1	0.2	1	0.05	2	0.06	
Dark Volcanic	V10	0	0	2	0.1	2	0.06	
Non-micaceous Phyllite-Schist	V11	3	0.5	0	0	3	0.1	
Pale Volcanic	V12	0	0	1	0.05	1	0.04	
Granite	V13	2	0.4	6	0.3	8	0.3	
Fine Buff with Temper	V14	0	0	0	0	0	0	
Fine fabrics	Fine Buff		25	4.4	145	7.6	170	6.9
	Fine Dark Buff-Grey Micaceous		5	0.9	29	1.5	34	1.4
	Fine Mottled		4	0.7	37	1.9	41	1.7
	Fine Grey		79	14.2	261	13.7	340	13.7
	Fine Dark Grey		15	2.7	59	3.1	74	3.0
	Fine Hard Blue-Grey		87	15.5	233	12.2	320	12.9
	Fine Orange		42	7.5	157	8.2	199	8.1
	Fine Red-Brown		16	2.8	70	3.7	86	3.5
	Fine Dark Green-Brown Micaceous		2	0.4	12	0.6	14	0.6
	Fine Pink		12	2.1	21	1.1	33	1.3
	Fine White		0	0	1	0.05	1	0.04
	TOTAL			562	100	1912	100	2474

shows, fragments of these two shapes may amount to 70–80 per cent of the diagnostic sherds from each trench. Although both shapes also appear within the Dhaskalio assemblage (though significantly not the stamped and incised variety of conical-necked jar), their numbers are eclipsed by the so-called low-value ‘household wares’, which includes shapes such as storage jars, bowls, cooking pots, baking pans and braziers. These ‘household wares’, which occur in predominantly coarse to medium fabrics, also

appear within the Special Deposit South assemblage, though in this deposit they are eclipsed by vessels considered to have special cultural value, to which multiple-headed lamps, drinking and pouring shapes of the Kastri Group and painted jugs (in both fine and medium fabrics) can be added to the sauceboats and conical-necked jars in this high-value category.

In terms of frequency, it is perhaps significant that the same three macroscopic fabrics appear within the top three of each trench and all form over 10 per

Table 6.3. Comparison of trenches with respect to most frequent macroscopic fabrics.

	D1	D3	(D1+D3)	
Highest	Fine Hard Blue-Grey	Fine Grey	Fine Grey	>10%
	Fine Grey	Sandy – C	Fine Hard Blue-Grey	
	Sandy – C	Fine Hard Blue-Grey	Sandy – C	
	Calcite – A	Sandy – B	Sandy – B	1–10%
	Fine Orange	Fine Orange	Fine Orange	
	Calcite – B	Calcite – B	Calcite – B	
Micaceous Quartz	Fine Buff	Fine Buff		
Sandy – B	Micaceous Quartz	Micaceous Quartz		
Fine Buff	Micaceous Schist – C	Micaceous Schist – C		
Quartz – B	Fine Red-Brown	Fine Red-Brown		
Fine Red-Brown	Fine Dark Grey	Fine Dark Grey		
Fine Dark Grey	Calcite – C	Calcite – A		
Quartz – A	Fine Mottled	Quartz – A		
Dark Phyllite – B	Quartz – A	Calcite – C	<1%	
Fine Pink	FDBGM	Fine Mottled		
Micaceous Schist – C	Quartz – B	Quartz – B		
Calcite – C	Fine Pink	FDBGM		
FDBGM	Calcite – A	Fine Pink		
Micaceous Schist – A	Sandy – A	Dark Phyllite – B		
Micaceous Schist – B	FDGreenM	FDGreenM		
Fine Mottled	Dark Phyllite – A	Sandy – A		
Dark Phyllite – A	Micaceous Schist – A	Micaceous Schist – A		
Red Phyllite	Micaceous Schist – D	Dark Phyllite – A		
N-M Phyllite Schist	Granite	Granite		
Granite	Dark Phyllite - B	Red Phyllite		
FDGreenM	Micaceous Schist – B	Micaceous Schist – B		
Talc	Dark Volcanic	Micaceous Schist – D		
Lowest	Sandy – A	Red Phyllite	N–M Phyllite Schist	
	Micaceous Schist – D	Talc	Talc	
	Dark Volcanic	Pale Volcanic	Dark Volcanic	
	Pale Volcanic	Fine White	Pale Volcanic	
	Fine Buff w Temper	N-M Phyllite Schist	Fine White	
	Fine White	Fine Buff w Temper	Fine Buff w Temper	

cent of the sample material (see Table 6.3): Fine Grey, Fine Dark Grey and Sandy variant C. To compare briefly with Dhaskalio, the only phase that contains similar levels of Sandy variant C is the final Phase C (14.5 per cent, compared to the 2.8 per cent and 2.4 per cent of Phases A and B respectively). Overall there is consistency in the relative frequency of most macroscopic fabrics between the two trenches studied in the Special Deposit South. The few notable exceptions (see Table 6.2) are Calcite variant A (7.5 per cent in D1, but only 0.8 per cent in D3), Sandy variant B (4.4 per cent *vs* 9.4 per cent), Fine Buff (4.4 per cent *vs* 7.6 per cent)

and Micaceous Schist variant C (1.4 per cent *vs* 4.3 per cent). As similar vessel shapes are documented in both trenches, and the stratigraphic sequence is sufficiently disturbed to prevent precise chronological reconstruction, there is unfortunately little else to draw upon to explain these variances.

The Special Deposit South macroscopic fabrics: medium to coarse wares

In addition to the material analysed from Trenches D1 and D3, the macroscopic study draws heavily upon

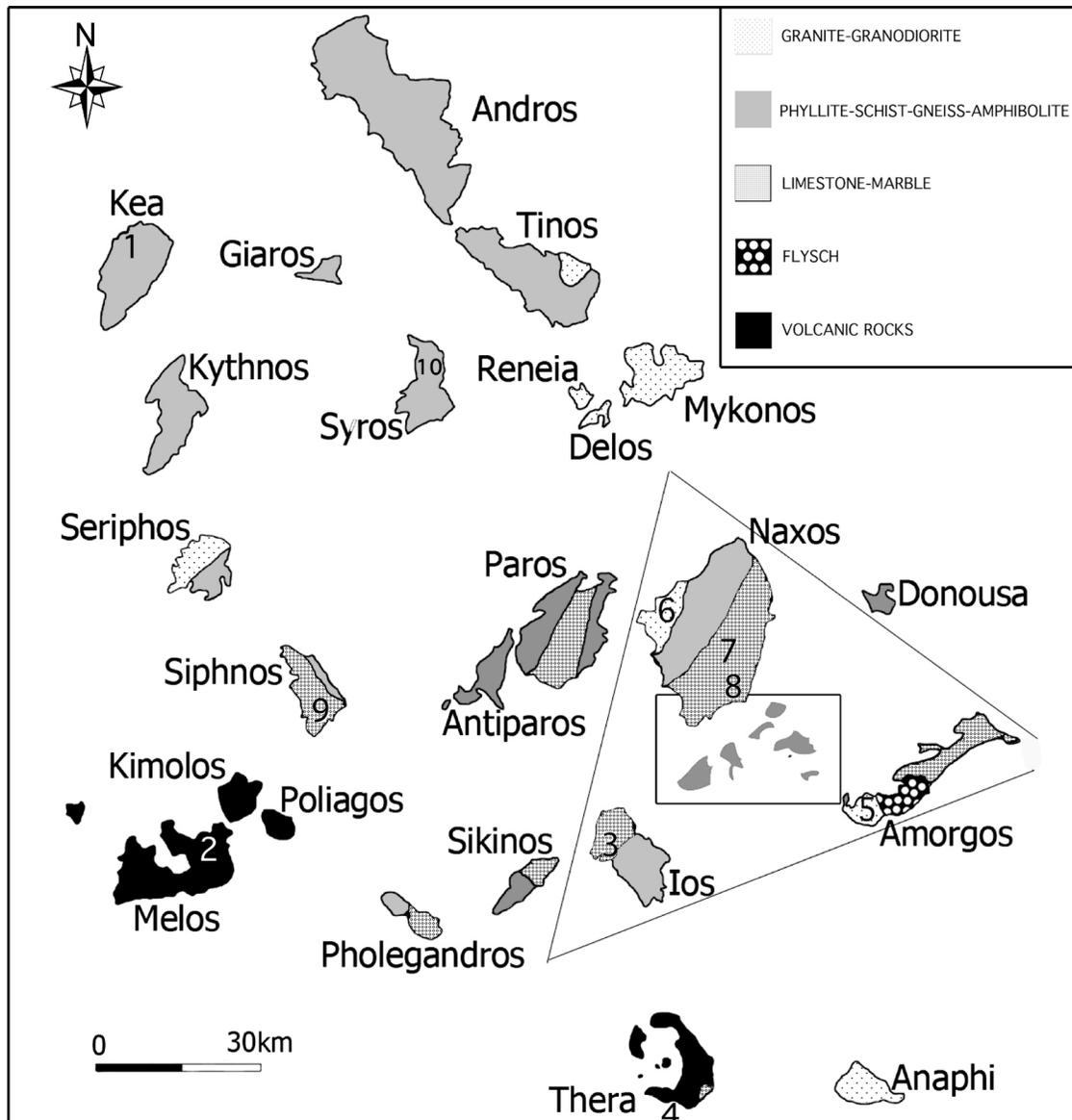


Figure 6.1. Geological sketch map of the Cyclades indicating the 'Keros Triangle' and (in rectangle) the Mikres Kyklades (Small Cyclades). Sites indicated: 1. Ayia Irini (Kea); 2. Phylakopi (Melos); 3. Skarkos (Ios); 4. Akrotiri (Thera); 5. Markiani (Amorgos); 6. Grotta (Naxos); 7. Zas Cave (Naxos); 8. Panormos (Naxos); 9. Akrotiraki (Siphnos); 10. Chalandriani (Syros).

the preliminary catalogued material (476 sherds) from across the Special Deposit South compiled by Sotirakopoulou. The final published catalogue (Volume V), of necessity, will form an abridged version of the preliminary catalogue studied macroscopically. Although this sample could not be used for statistical purposes, the high-resolution typo-stylistic information provided a valuable insight to the range of vessels shapes and surface treatments corresponding to each macroscopic fabric, listed under the group descriptions below. Where no stylistic information is given, the vessels in question are plain.

The macroscopic fabrics were initially classified in the field on the basis of inspection using a hand lens. Where quantitative counts are given, these are therefore the categories which have been utilized. Petrographic and chemical analysis, using neutron activation analysis, was subsequently undertaken to assess the coherence of the macroscopic fabric groups and provide greater resolution on the composition and technology of each fabric. Brief comment on these follows later in this chapter, with a more detailed study of the integrated petro-chemical analyses from the Special Deposit South, along with comparable samples

from Dhaskalio, given in Volume III. The classification followed here was informed by the earlier system used for the Special Deposit North, combining the macroscopic work carried out by Broodbank (2007) and the subsequent petrographic study (Hilditch 2007). For the sake of clarity, the macroscopic fabric classes here are prefixed by the letter V, and the petro-fabric classes, based on microscopic examination, will be prefixed by the letter P. It should be noted that, while there is some correlation between the macroscopic fabric and petrographic classes, they are certainly not identical, as is clearly shown below in Table 6.5. A map of the production locations discussed for the following macroscopic fabrics is shown in Figure 6.1. For colour photographs of each macroscopic fabric, see Plate 15.

Quartz - V1

V1A - non-grey firing, dense inclusions

V1B - grey firing, dense clay

Coarse c. 90 per cent, medium c. 10 per cent. The Quartz macroscopic fabric class has two variants, based upon the colour and density of the fired ceramic: V1A is medium to well fired, light brown to red-brown in colour with dense, large grey-white angular crystalline inclusions and rare mica; V1B is well fired, grey-brown to grey in colour with large grey-white angular crystalline inclusions and rare mica, with a noticeably denser clay, less frequent coarse inclusions, and consistently fired in a low-oxygen environment. The medium examples display close similarities to the Sandy group (especially between V1A and V2A/V2C, and also V1B and V2B), suggesting a possible shared origin.

Vessel shapes include:

V1A: basin, brazier, conical-necked jars (plain, incised, herringbone incised and incised and impressed Syros-type with Kerbschnitt and concentric circles), cylindrical-necked jar, deep bowl, jug (incised criss-cross decoration on handle), miniature pithoid jar (incised and relief rope decoration), multiple-headed lamp (plain, grooved and incised), one-handled tankard, pithoid jar (plain and radiating incisions), pyxis, rolled-rim bowl, sauceboat and spouted vessel; V1B: only conical-necked jars (plain and incised) and rolled-rim bowls appear within this group.

This macroscopic group is the same as Broodbank's Quartz group (2007, 120–22), which displayed variation with respect to firing regime and the range of visible inclusion types. The subgroups presented here provide a clearer separation of the firing variations and the possible overlap with examples from the Sandy group. The distinct clay and firing differences may indicate a separate tradition or production unit for these two subgroups. However, the range of possible sources for this group remains firmly within the Keros Triangle, including the island of Keros itself, the Kouphonisia and Naxos.

Sandy - V2

V2A - red sandy

V2B - grey sandy

V2C - buff sandy

Medium 100 per cent. The Sandy macroscopic fabric class is a broad group characterized by the presence of consistent sand-sized inclusions. Medium to well fired, containing moderately dense to very dense sand-sized inclusions of different colours and compositions, including friable white calcareous grains, buff to orange crystalline grains, dark red-brown to black rounded grains, occasional microfossils and rare gold and silver mica. Subgroup V2A exhibits predominantly red to brown clay with a slightly higher percentage

of white inclusions. Subgroups V2B and V2C are characterized by the same mixed range of inclusion types, but V2B displays grey fired colours while V2C has buff to light brown fired colours. This group has close parallels with medium examples from the Quartz group (V2A/V2C and V1A, and V2B with V1B). In some cases there were considerable visual similarities between the Sandy V2C and Pale Volcanic (V12) macroscopic fabrics, which is discussed in more detail later with the latter macroscopic fabric.

Vessel shapes include:

V2A: conical-necked jars (plain), jug, lid and pithoid jar;

V2B: only the one-handled tankard appears in this group;

V2C: this subgroup has the greatest range of vessel shapes, including baking pan, basin, brazier, concave-necked jar (plain and relief fingerprint decoration), conical-necked jars (plain, incised, herringbone incised, and incised and impressed decoration of superimposed chevrons and Kerbschnitt), deep bowl, jug, kylix (dark brown slipped and burnished), lid, multiple-headed lamp (plain, incised, impressed Kerbschnitt, incised and impressed, and red slipped and burnished), neckless jar, pedestalled jar, pithoid jar (relief rope pattern decoration), sauceboat and zoomorphic vessel.

The Sandy subgroups are a refinement of the Sandy group, as outlined by Broodbank (2007, 122–4). Subgroup V2C seems to be the strongest candidate for the pale Neogene deposits of the Kouphonisia, as much of the pottery observed from the ongoing Tzavaris plot excavations on Ano Kouphonisi corresponds to this macroscopic fabric (as do the pedestal-based collared jars from Kato Kouphonisi: Zapeiropoulou 1970a, fig. 373a). Subgroups V2A and V2B may represent a continuum between the sandier versions of the Quartz group and therefore a provenance within the Keros Triangle, and even on Keros itself, is most likely.

Dark Phyllite - V3

V3A - dark platey inclusions

V3B - mixed (dark platey and angular white inclusions)

Coarse c. 75 per cent, medium c. 25 per cent. The clay is orange to red to dark-brown, sometimes grey with orange or brown margins, and often extremely friable from low firing conditions. Two subgroups have been identified: V3A is characterized by large, platey, blue-purple-black phyllite inclusions; V3B has the same dark phyllite inclusions, alongside significant quantities of bright white, angular crystalline inclusions and occasionally redder shale/phyllite inclusions, similar to the Red Phyllite macroscopic group described below.

Vessel shapes include:

V3A: amphora (East Aegean EB III type), deep bowl (with circular stud below rim), jug, neckless jar, pithoid jar and pyxis;

V3B: brazier (with mat impressions), concave-necked jar, jug (incisions on handle upper surface), lid (with large, impressed spirals), miniature conical-necked jar (incised), multiple-headed lamp, pedestalled jar, pithoid jar (radiating incisions) and pyxis.

Known widely within early bronze age Cycladic assemblages as 'Blue Schist ware', this group corresponds to the Blue Schist macroscopic group described by Broodbank for the Special Deposit North (2007, 124–5). Subgroup V3A is a direct parallel to Broodbank's Platey sub-variant of his Blue Schist Group for the Special Deposit North, while V3B corresponds to his Mixed sub-variant. The Dark sub-variant is not used as the darker, greyer and higher-fired members occur within both subgroups V3A and V3B. This group reflects exploitation of the distinctive manganese and iron-rich 'patelia' deposits on Amorgos (not glaucophane as previously thought: see Vaughan 2006 for a full discussion), although the subgroups may indicate two contemporary potting traditions within this island.

Red Phyllite - V4

Coarse c. 65 per cent, medium c. 35 per cent. The clay is orange-red to dark brown, mostly medium fired but lower-fired samples can be friable, and is dominated by the presence of flat, pink to red-brown phyllite inclusions, with very few darker blue phyllite and angular

white inclusions. Shapes include baking pan, cylindrical-necked jar, miniature cup (conical?), multiple-headed lamp and pithoid jar (radiating incisions).

As with the Dark Phyllite macroscopic group, there are strong parallels to assemblages on Amorgos, where it has been described as the 'Red Shale' macroscopic fabric (Vaughan 2006). The likelihood of this group originating on Amorgos seems almost certain, although petrographic analysis may help shed light on whether this group is a product of a distinct production unit from the other Dark Phyllite wares.

Micaceous Quartz - V5

Coarse *c.* 50 per cent, medium *c.* 5 per cent. Is characterized by white and grey crystalline inclusions alongside significant levels of silver mica and lesser amounts or absent gold mica, with rare orange to dark-brown, sand-sized inclusions. The clay is light brown to dark brown, often with a grey core and rarely entirely grey, well to medium fired. As with Broodbank's Micaceous Quartz group, there are strong similarities with other groups—higher levels of silver and gold mica distinguish the paler-fired, medium samples from the Sandy subgroup V2C and the all-grey samples from subgroup V2B, while the coarser samples tend to draw parallels with the grey firing Quartz subgroup V1B. There may also be overlap between this group and the Micaceous Other subgroup V6C (Muscovite-rich schist) if no schist inclusions were visible on the sherd surfaces or section break. This group is distinguished from the Granite group, which has coarse fraction quartz-mica-amphibole(?) inclusions, as it contains mica only in the fine fraction. Vessel shapes include baking pan, basin, bowl, conical-necked jars (plain, incised, impressed and incised with Kerbschnitt and vertical incisions), cylindrical-necked jar (with low-relief vertical ribs), deep bowl, jug, leaf-spouted jug (pair of short vertical ribs at mouth), miniature pithoid jar (incised and relief rope decoration), multiple-headed lamp (plain, incised, impressed Kerbschnitt, incised and impressed Kerbschnitt), neckless jar, pedestalled jar, and pithoid jar.

Broodbank's discussion of provenance for finds from the Special Deposit North for this macroscopic group remains pertinent, as the variation seen in both composition and firing regime does suggest a range of possible production units exploiting variable raw materials, most probably within the Keros Triangle on islands such as Naxos, Ios, Schinoussa or Irakleia, though Paros and Amorgos must not be ruled out completely. One certainty is that the micaceous component of this group is incompatible with the raw materials available within the vicinity of Dhaskalio-Kavos or more widely on Keros. The decrease in relative frequency of this group must be considered cautiously, if such a wide range of possible sources are indeed likely, though the lowest frequency in Phase C may correspond to the abandonment or decline of regional settlements towards the end of the EB period, such as Panormos on Naxos (Angelopoulou 2008) and Skarkos on Ios (Marthari 2008).

Micaceous Schist - V6

V6A - mixed schist and calcite

V6B - muscovite+biotite schist

V6C - muscovite schist

V6D - biotite schist

Coarse *c.* 85 per cent, medium *c.* 15 per cent. This class of macroscopic fabrics are distinguished by micaceous schist rock fragments as the dominant coarse fraction inclusion type, with ample fine fraction mica present too. The low to medium fired clay ranges in colour from yellow- to orange-brown as well as red to dark-brown, with rare grey cores, across all four subgroups. The main compositional differences can be summarized as follows: V6A is a mixture of micaceous schist—biotite (gold) and muscovite (silver) bearing—with calcareous inclusions, and V6B contains both muscovite- and biotite-bearing schist particles but no calcareous inclusions. The

variants V6C and V6D have a more limited range of inclusions, i.e. muscovite-rich schist in V6C and biotite-rich schist in V6D. Given the compositional variability of the schist fragments, it is unlikely that this class represents the output of a single production unit.

Vessel shapes include:

V6A: baking pan, basin, cylindrical-necked jar, deep bowl, funnel-necked jar, jug, neckless jar and pithoid jar;

V6B: baking pan, brazier, funnel-necked jar, multiple-headed lamp (incised), neckless jar (with horizontal relief band), pedestalled jar, pithoid jar, pithos and pyxis (incised);

V6C: baking pan, cooking pot, funnel-necked jar and pithoid jar (plain and horizontal relief band);

V6D: jar with horizontal arched handles, multiple headed lamp, two-stage necked jug.

This Micaceous Schist group is similar to Broodbank's Micaceous Other category for the Special Deposit North, in that it contains a range of micaceous fabrics characterized by low levels of individual quartz grains. The compositional range of schist outcrops within the Keros Triangle alone is extensive, often varying within a single island too, such as those seen on Naxos, Ios and Amorgos. The high mica content of all of these samples are incompatible with the raw materials around Dhaskalio-Kavos and on Keros generally, making all the Micaceous Schist subgroups imports to the site. As with the Micaceous Quartz group, a range of raw materials and production units are likely responsible for these imports, so the relative frequency must be considered cautiously.

Calcite - V7

V7A: coarse crystalline

V7B: sandy crystalline

V7C: coarse crystalline and micaceous

Coarse *c.* 70 per cent, medium *c.* 30 per cent. This macroscopic fabric class has three variants, coarse calcite-bearing (V7A), sub-rounded to angular sand-sized calcite-bearing (V7B) and calcite in a biotite-bearing clay (possibly muscovite too), both in the coarse and fine fractions (V7C). All variants are medium fired and reveal a broad range of firing colours, from pale to dark brown, red, orange and even grey to black. These subgroups represent the variation observed within Broodbank's Marble group for the Special Deposit North (2007, 126).

Vessel shapes include:

V7A: baking pan, conical-necked jar, miniature pithoid jar (incised and relief rope decoration) and multiple-headed lamp;

V7B: basin, conical-necked jars (plain and incised), cup (white-on-dark slip painted decoration in cross-hatching), deep bowl, multiple-headed lamp (incised herringbone), pyxis (black burnished) and spouted vessel;

V7C: brazier, conical-necked jar (incised), multiple-headed lamp, pyxis and sauceboat.

The micaceous and non-micaceous subgroups strongly suggest the use of different clay pastes and deliberate tempering activities in the production of this fabric. Subgroup V7C is incompatible with a Kerian provenance due to the high mica content, but the possibility of V7A and V7B originating on Keros must be considered, as marble is the dominant rock type across the island and forms entirely the islet of Dhaskalio. However, the calcite-tempering tradition is attested across the early bronze age Cyclades, from sites such as Grotta and Zas Cave on Naxos (Hilditch 2005a,b), Markiani on Amorgos (Vaughan 2006) and at the cemetery of Aghia Photia on the north coast of Crete, which displays strong links to the Early Cycladic culture (Day *et al.* 1998, 138). The likelihood of locally produced calcite-tempered fabrics at numerous locations, as opposed to a single production source with wide distribution, is strengthened by the analysis of calcite-tempered pottery at Poros-Katsambas on Crete (Wilson *et al.* 2008, 262).

Talc - V8

Coarse 100 per cent. The Talc group equates to Broodbank's macroscopic group of the same name for the Special Deposit North, characterized as 'a soapy texture and reddish-purple to (less commonly) orange-brown fabric, with large pale blue-grey inclusions and lack of mica ... it is well fired but quite friable' (2007, 126). The only catalogued vessel shape in this group is a pedestalled jar.

As Broodbank states, 'this fabric is one of the most recognizable in the Cyclades' (2007, 126), though little has been published on this fabric since the study by Vaughan and Wilson (1993). The island of Siphnos has been proposed as the source of this fabric (Vaughan & Wilson 1993), although Palamari on Skyros does offer a potentially alternative source, as talc-rich rocks have been identified within the vicinity of the site and a large proportion of the EB II and III assemblage is composed of this fabric (Parlama 1984).

Dark Volcanic - V10

Coarse *c.* 70 per cent, medium *c.* 30 per cent. The Dark Volcanic macroscopic fabric contains small, angular, dark shiny mafic minerals (biotite/amphibole?), probably from a volcanic origin. Other inclusions can vary, with mixtures of grey to orange friable grains, white and grey crystalline grains, fine fraction gold and/or silver mica and red, brown and black porous grains (lava fragments?). The clay is orange to red through to dark brown, often with a dark grey core that can appear slightly blueish. The group is medium to well fired and rarely friable. Dark Volcanic has strong similarities to Broodbank's Biotite macroscopic group for the Special Deposit North (2007, 127), although the paler samples he describes have been separated into the Pale Volcanic group. This group contains the following shapes: baking pan, depas cup (black burnished) and leaf-spouted jug (plain).

The proposed volcanic origin for this group, and Broodbank's Biotite group for the Special Deposit North, is supported by analyses at Markiani of a similar macroscopic fabric found to contain lava grains (tentatively identified as basalts), plagioclase phenocrysts and cherts (Vaughan 2006). Possible sources for volcanic rock fragments are focussed on the Cycladic islands of Melos, Thera and Anaphi, as well as Aegina in the Saronic Gulf, though they are more acidic in nature than mafic-rich basalt derived deposits. Red brown volcanic-derived fabrics form a major part of the early bronze age assemblage at Phylakopi on Melos (Vaughan & Williams 2007, 114), supporting a Melian provenance over Thera, which consistently produces paler brown and pink fabrics with no blueish core during this period (Vaughan 1990, 472–4). Aegina still remains a possibility, however, as the widespread andesite rocks are more mafic than the rhyolite-dacite rocks that dominate Melos, and a non-calcareous volcanic fabric is one of the dominant local fabric groups (FG 1: Kiriati *et al.* 2011, 93–9).

Non-Micaceous Phyllite-Schist - V11

Coarse *c.* 85 per cent, medium *c.* 15 per cent. Medium fired fabric; the clay ranges from a pale brown to a dark red-brown with large elongate, non-micaceous, quartz-bearing phyllite to schist inclusions, alongside quartz crystalline inclusions and rare to absent mica in the fine fraction. This macroscopic group has no parallels from the material recovered during the 1987–88 investigations in the Special Deposit North. Vessel shapes in this group include baking pan, basin and multiple-headed lamp (incised and impressed Kerbschnitt).

This group differs from the Micaceous Quartz and Micaceous Schist groups due to the very low levels or absent mica, in both the coarse and fine fractions of the fabric. Possible raw material sources within the Keros Triangle are numerous, including the flysch deposits from Amorgos, the pelitic schists from south-central Naxos, and possibly also on Keros itself, as muddy quartz-schist collected from the foothills behind Gerani during this study (courtesy of Maniatis and Dixon) might offer a viable source. A low-micaceous

schist fabric has been identified within material from Grotta and Zas Cave on Naxos by the author, though these findings have yet to be published fully.

Pale Volcanic - V12

Coarse *c.* 25 per cent, medium *c.* 75 per cent. Well-fired fabric; the clay is predominantly buff to dark buff, tending towards pink or pink-brown in the coarser examples. A greenish tinge is present in the very well fired examples. The inclusions are a mixture of friable white calcareous material and volcanics, such as porous black, brown and red inclusions and occasional white crystalline grains, with minimal amounts of silver mica and rare gold mica. The Pale Volcanic macroscopic fabric differs from the darker variant (V10) by both firing colour and type of volcanic inclusions. Whereas the Dark Volcanic macroscopic fabric contains angular dark biotite/amphibole crystals alongside quartz/feldspar type inclusions, the Pale Volcanic variant has low biotite/amphibole content, with higher levels of porous lava fragments and friable buff calcareous inclusions. Also, the consistently pale (buff) firing colour gives this macroscopic fabric a similar appearance to the Sandy variant V2C, a particularly interesting feature when considering the Phase C sample assemblage, where Pale Volcanic and Sandy V2C have the greatest relative frequencies. This macroscopic group has no parallels from the material recovered during the 1987–88 investigations in the Special Deposit North. A limited range of shapes have been catalogued in this group within the Special Deposit South, in comparison to the broad range catalogued on Dhaskalio. They include a bridge-spouted jar (with a strainer at the spout) and a multiple-headed lamp (incised).

Suggested provenance for the Pale Volcanic group lies between Melos and Thera, the two Cycladic islands known for producing the pale volcanic fabrics, including Cycladic White ware (Vaughan *et al.* 1995) during the succeeding Middle Cycladic period. At Phylakopi on Melos, pale volcanic fabrics only appear within the very late deposits of the early bronze age, the Phylakopi I phase (Renfrew *et al.* 2007c; Barber 1987), whereas paler volcanic fabrics are present from the earliest levels at Akrotiri on Thera (Sotirakopoulou 1986; 1990; Vaughan 1990). However, an Aeginetan provenance is also possible, as one of the main local bronze age fabric groups is a paler, calcareous version derived from the local andesitic deposits (FG 2: Kiriati *et al.* 2011, 99–104). Petrographic analysis will enable more detailed characterization for considering the coherence and provenance for this group.

Granite - V13

Coarse *c.* 100 per cent. Medium-fired fabric; the clay is pale orange to brown with less frequent reddish-brown samples. The core tends towards grey or dark brown, and is rarely black. Inclusions are predominantly large, crystalline inclusions composed of translucent and white opaque minerals with visible black minerals and gold mica/amphibole. The fine fraction contains extremely variable levels of gold and silver mica. This macroscopic group has no parallels from the material recovered during the 1987–88 investigations in the Special Deposit North. Only two shapes have been catalogued within this group, a baking pan and a brazier.

Compatible raw materials for this group are the granite-granodiorite units of Naxos and Paros. Little petrographic work has been undertaken on early bronze age fabrics from Paros, but there are strong parallels with Late Neolithic and EC material from Grotta and Zas Cave on Naxos, as well as later MC material from Mikre Vigla on Naxos (Vaughan 1989).

Fine Buff with Dark Temper - V14

Medium 100 per cent. Well fired with a very fine, buff groundmass and sand-sized inclusions of red to dark-brown grains, occasionally angular in shape, possibly intentionally added. There is no mica in the fine fraction. The sherds have a smooth, non-dusty feel,

which distinguishes them from some of the finer, low-mica Sandy 2C subgroup samples and the Pale Volcanic group samples. This group has no catalogued vessels.

This group bears a striking resemblance to the finer Neogene-derived fabrics of Crete, as the clay groundmass is extremely fine and the inclusions are well-sorted, sand-sized deliberate additions to the paste, a Minoan tradition of paste processing attested from sites in north and south central Crete, including the Mesara Plain (Day & Wilson 1998; Whitelaw *et al.* 1997; Wilson & Day 1994). Petrographic analysis may help consider the relationship of this group to the pale fine fabrics of this study too.

The Special Deposit South macroscopic fabrics: fine wares

Within Trenches D1 and D3, the vast majority of sherds characterized macroscopically as fine ware have been identified as sauceboat fragments (1140 out of a total 1312: 86.9 per cent). The second most frequent category within the fine wares is 'body fragments with painted dark-on-light decoration' with 63 sherds (4.8 per cent), followed by painted dark-on-light jugs (1.3 per cent) and conical-necked jars of Syros-type (0.9 per cent; see implications section at the end of this chapter for probable biases within the sherd-fabric counts within the Special Deposit South material). As such, the typo-stylistic information incorporated within the following macroscopic descriptions draws upon both the trench material analysed by Sotirakopoulou and her preliminary catalogued material to give the broadest picture of the fine wares found across the Special Deposit South.

Fine Buff

This group equates to Broodbank's Fine Buff group for the Special Deposit North (2007, 127–8), being mid-buff to a pale orange or darker buff in colour, with rare inclusions and fine fraction mica. The firing states are varied, from medium to well fired, as with Broodbank's group. The range of vessel shapes appearing in this fabric within the Special Deposit South is broad, including the conical-necked jar (Syros-type with a buff-greenish slip and possible dark painted decoration), jug (with incised decoration and painted or dark-on-light decoration), krateriskos (incised, and incised and impressed with Kerbschnitt), a possible kylix (with dark-on-light decoration), multiple headed lamp (with grooved decoration), pyxis (spherical and biconical examples, usually dark-on-light decorated but the biconical example was plain), and sauceboat (plain, dark-on-light, brown-black urfirmis, black and brown painted, whitish slip).

There are strong parallels with the Fine Buff group observed in the Special Deposit North assemblage. Both groups are dominated by sauceboats and contain predominantly painted varieties of decoration, in addition to incised decoration, though the Special Deposit North displays a wider range of slipped treatments: Cream Slipped, Grey-Brown Slipped and Orange Slipped do not appear within the D1 and D3 trench material or the preliminary catalogue finds. Broodbank argued for a diverse range of provenances for this fabric group, given the diffuse nature of decoration and shapes, which also characterizes the Special Deposit South Fine Buff group.

Fine Dark Buff-Grey Micaceous

This group is related to Broodbank's Fine Dark Buff Micaceous for

the Special Deposit North (2007, 129), though samples with darker firing colours have also been included here. The clay colour ranges from dark buff to pale grey through to dark grey. In addition to rare fine sand-sized quartz inclusions, all the samples within this group contain significant levels of fine fraction mica, predominantly silver, rarely mixed with gold mica, which distinguishes them from the non-micaceous Fine Buff and Fine Grey groups, and the gold mica-rich Dark Green-Brown Micaceous group. Dark Green/Brown Micaceous also differs in that the fired colours show no sign of reduced-firing conditions and the group is consistently fine with no fine sand inclusions.

A number of vessel types correspond with this macroscopic group, including bowls (red slipped, and with relief lozenges), conical-necked jars of 'Syros-type' (usually impressed with Kerbschnitt, a seal, spirals or concentric circles), jugs (dark-on-light painted on a blueish slip), one-handled footed cup (dark-on-light), one-handled tankard (Anatolian type), pyxides (plain, dark-on-light and fugitive brown burnished slip), sauceboats (plain, dark-on-light, black urfirmis and red urfirmis) and a zoomorphic vessel (plain).

Fine Mottled

This group equates to Broodbank's Fine Mottled category for the Special Deposit North (2007, 128–9), as the clay is extremely fine and well fired with a mottled colour that ranges from pale yellow-pink to pale blue-grey. As with the Special Deposit North material, Fine Mottled within the Special Deposit South is associated almost exclusively with sauceboats, rarely with a pale slip that displays the same mottling pattern as the fabric, and a lone example of one-handled footed cup with dark-on-light painted decoration on a mottled slip.

Broodbank's discussion of provenance remains a relevant summary for this distinctive macroscopic/surface treatment association, commonly referred to as Yellow Mottled at other contemporary Cycladic sites such as Ayia Irini, Phylakopi and Skarkos (Broodbank 2007). Given the distinctive appearance of this fabric and the relatively low frequency within the Special Deposit South material (0.7 per cent and 1.9 per cent in D1 and D3 respectively), this macroscopic fabric was not chosen for subsequent chemical analysis. As such, production of this fabric is still widely associated with a number of possible sites on the Greek mainland and rare settlements on the islands too (see brief summary in Hilditch 2007, 249).

Fine Grey

The samples of this group are characterized by a grey fabric, sometimes with a paler grey core and often with very thin orange or pink margins. There are no visible inclusions within the fabric, not even fine fraction mica, which distinguishes this group from Broodbank's Fine Grey for the Special Deposit North (2007, 129) and also from the grey coloured samples within the Fine Dark Buff-Grey Micaceous group. The pink and orange margins do tend in colour towards the samples within Fine Pink and Fine Orange, but these latter groups rarely exhibit core-margin firing differences and contain variable levels of fine fraction mica. Vessel shapes within this group include a possible conical cup (dark-on-light painted decoration), jugs (plain and dark-on-light painted), neckless jars (plain and white-on-dark painted decoration), one-handled footed cups (dark-on-light painted), pyxides (plain and dark-on-light painted) and sauceboats (plain and dark-on-light painted).

The broad range of surface treatments, particularly slipped decoration, recorded by Broodbank for the Fine Grey group of the Special Deposit North reinforces the difference between these two macroscopic groups. Despite this group appearing in the three most frequent fabrics within both Trenches D1 and D3, there are no distinctive features, either in composition, typological repertoire or surface treatment, to suggest an alternative production location to other fine wares within the Special Deposit South.

Fine Dark Grey

There are no parallels for this group within Broodbank's macroscopic analysis for the Special Deposit North. The group is characterized by a very dark, charcoal grey colour, with occasionally orange external margins. There is no mica in the fine fraction, though there are rare instances of fine sand-sized quartz inclusions. This group seems less well fired than most of the other fine groups and can occasionally be friable in broken sections. This group may constitute a lower-fired, more reduced version of the Fine Grey samples, but only the petrographic and chemical analyses will be able to characterize any possible connection in more detail. Vessel shapes within this group include conical-necked jars of 'Syros-type' (with interlocking concentric circles), a jug, a miniature conical-necked jar (black burnished), a pyxis (with incised decoration on shoulder) and sauceboats (plain, with vertical rib below handle, with horizontal rib below handle, and an example with blueish slip and horizontal relief band with rope pattern).

A closer comparison of this macroscopic group and the Fine Grey group reveals some interesting differences with respect to surface treatment. There is only one dark-on-light decorated sherd within this group, whereas this decoration forms the dominant surface treatment within Fine Grey. This would argue against Fine Dark Grey forming an acceptable, or even unintentional, firing variation of Fine Grey. However, in common with the Fine Grey group, there is no clear indication of provenance based solely upon the extremely fine and non-micaceous nature of this macroscopic fabric. The range of vessel shapes is similar to several other fine macroscopic groups within this study and again does little to distinguish a distinctive character for this group that might have suggested an alternative provenance.

Fine Hard Blue-Grey

This group has no direct parallels within Broodbank's macroscopic fine wares for the Special Deposit North: his Fine Hard Grey is described as both high-fired and a grey-blue colour, but it also a rare occurrence within the Special Deposit North and corresponds only to pedestal-based cups (described as one-handled footed cups within the Special Deposit South). The clay is a distinctive dark blue-grey colour, often with bright orange or brown margins, and contains low to rare levels of gold mica within the fine fraction. The group is mainly well fired, though surface flaking in some examples may be due to lower firing. Despite there only being sauceboat fragments observed in this macroscopic fabric, the dominance of this shape within the Special Deposit South assemblage accounts for the consistently high frequency of this group within Trenches D1 and D3 (15.5 per cent and 12.2 per cent respectively).

A range of surface treatments has been observed, mostly slipped (buff-whitish to whitish-blue to blueish) and black urfurnis. The paler slip varieties occasionally resemble the relatively well-preserved sherds within the Fine Mottled group. However, this macroscopic group has a high level of poorly preserved sherds with badly encrusted surfaces, perhaps due to a slightly higher calcareous component within the slip and hinting at a difference between these slips and the Mottled surface treatment, and there are several sherds that may display traces of dark-on-light painted decoration. In general this group seems to bear a strong correlation to the urfurnis decorated sauceboats that appear throughout the Aegean region in the EB II period, with a possible variation of the Mottled slipped vessels also appearing in significant numbers. Traditionally these wares are thought to provenance within the Greek mainland (see Broodbank 2007 for a summary), with a western Cycladic (possibly Melian) origin proposed for some urfurnis (Wilson 1999, 231).

Fine Orange

This group equates to Broodbank's Fine Orange group for the Special Deposit North (2007, 128), which displays an unusually soft fabric, due to low to medium firing conditions. The clay ranges in

colour from pale orange to red-orange and frequently displays a thin, pale grey core. Fine fraction micas, both gold and silver, are visible but not abundant and fine sand-sized quartz inclusions occur infrequently. Vessel shapes within this macroscopic group include jugs (red urfurnis, painted dark-on-light), a jug with leaf spout (plain), sauceboats (plain, black urfurnis, possible impressions), a spoon-shaped pyxis and a possible zoomorphic vessel.

As with the Special Deposit North material, there is no indication of provenance for this group, though Broodbank did suggest Ios as a possible candidate for production of this macroscopic group, given the abundance of micaceous clay and the possibility of locally made sauceboats at Skarkos (Marthari 2008). Petrographic analysis can help distinguish if there is a correlation between this fine ware and the suggested Iotic coarse micaceous wares of the V6 macroscopic group.

Fine Red-Brown

This group has no parallels within the 1987–88 material from the Special Deposit North. The clay is consistently red-brown to brown, relatively micaceous with sparse fine quartz and black inclusions and medium fired. This group contains conical-necked jars of 'Syros-type' (incised and impressed with Kerbschnitt, concentric circles, spirals and a possible seal), a depas cup, a one-handled tankard and a small jug with a bridge-spout. Surface treatment is predominantly incised and impressed decoration with a lone Brown Slipped and Burnished vessel with no clear typological profile.

Most of the vessels within this macroscopic group correspond to the Anatolian-type shapes of the Kastrì Group, a distinct repertoire of drinking and pouring shapes that appears in the later phases of the EB II period alongside traditional Cycladic shapes and may persist into the early EC III period; however, this group remains poorly understood, both chronologically and analytically, both at the macroscopic and petrographic level. Kastrì Group shapes also appear in medium fabrics, suggesting that a mixture of imports and local imitations of these distinctive vessel shapes seems most likely, though whether all medium versions represent Cycladic or other imitations within the Aegean has yet to be confirmed.

Fine Dark Green-Brown Micaceous

This group also has no parallels within the 1987–88 material from the Special Deposit North. The clay is a dark green-brown to very dark brown colour with abundant fine fraction mica, predominantly gold, though rare sherds do appear to contain low levels of silver mica also. This group is associated predominantly with stamped (impressed) and incised conical-necked pedestalled jars, known as Syros-type jars, with various types of stamped and incised decoration, including Kerbschnitt, spirals, concentric circles and patterned seals. There is also a jug with a beaked spout (with vertical incisions above the handle root) and a few sauceboats (plain and with a fine relief band with rope pattern decoration).

Although the conical-necked pedestalled jar of Syros-type is strongly associated with this macroscopic fabric, this does not confirm a Syriote provenance. Conical-necked pedestalled jars are found within several different island assemblages, with the stamped and incised variety particularly frequent within the Chalandriani cemetery (see Broodbank 2000, 204, fig. 61, for a distribution map of this vessel type within the Cyclades). Little to no fabric work has been undertaken on Syros to provide a general picture of locally available raw materials on the island, though Broodbank writes that a northeastern Cycladic source seems highly likely, given the distribution of such vessels within the islands (Broodbank 2000).

Fine Pink

The Fine Pink group is loosely related to the Fine Residual—Pink variant identified by Broodbank for the Special Deposit North (2007, 129–30). The samples are more consistently medium fired than the low-fired, 'talc-like texture' observed by Broodbank, though the thin,

Table 6.4. Full range of fine ware vessel shapes and their corresponding macroscopic group. *Fine Dark Buff-Grey Micaceous; **Fine Dark Green-Brown Micaceous.

SDS Fine Wares	Fine Buff	FDBGM*	Fine Mottled	Fine Grey	Fine Dark Grey	Fine Hard Blue-Grey	Fine Orange	Fine Red-Brown	FDGreenM**	Fine Pink	Fine White	TOTAL
conical-necked jars (plain)		2										2
conical-necked jars (Syros type)		6			2				4			12
neckless jars with horizontal ledge/relief band below rim	1											1
funnel-necked jars		1										1
jug fragments		2		1			1					4
narrow-necked jugs				1	1							2
beaked jugs with leaf-shaped mouths		2		1					1			4
cylindrical handles of jugs		1										1
painted dark-on-light jugs	9	2		5			1					17
spherical/lentoid pyxides	2	2		1	2							7
painted dark-on-light pyxides					1			1				2
pyxis lids with curved tops	2											2
closed vessels with incised-and-pointillé decoration					2							2
one-handled tankards/depas amphykipellon		3						2				5
pale conical cups with stud/s below rim											1	1
vessels with high funnel-shaped necks & incised-and-pointillé decoration				3	1	1						5
sauceboats	112	2	40	311	54	314	191	78	9	29		1140
one-handled footed cups with painted dark-on-light decoration			1			5						6
open bowls with incurving rims					1							1
bridge-spouted vessels in fine fabrics							1					1
body fragments of vessels with vertical handle/s		1										1
body fragments with incised decoration	1	1										2
body fragments with perforation/s					1							1
body fragments with painted dark-on-light decoration	35			16	8			2		2		63
body fragments of closed vessels with Kerbschnitt decoration	1											1
body fragments of jugs/jars with decoration of vertical ribs	1	6										7
flat bases and lower walls of closed vessels							3	2		1		6
flat bases and lower walls of open vessels	2						1					3
flat bases and lower walls of jars/jugs with decoration of vertical ribs					1							1
vertical cylindrical handles	1											1
vertical strap handles								1				1
vertical cylindrical/strap handles painted dark-on-light	1											1
cylindrical handle fragments		1								1		2
horizontal strap handles of jars	2			1								3
horizontal arched handles of jars		1										1
horizontal handle fragments of jars, ellipsoid in section		1										1
sherds of historical periods							1					1
TOTAL	170	34	41	340	74	320	199	86	14	33	1	1312

pale grey core appears less frequent. There is some visible mica in the fine fraction but no other inclusions are present. All the recorded shapes that correspond to this macroscopic fabric were sauceboats, usually with animal protomes, and no traces of decoration.

Fine White

This group equates to Broodbank's Fine White macroscopic fabric for the Special Deposit North (2007, 128), though the observed colour range is more limited, being an off-white to very pale buff-green. The latter is always high fired, whilst the whiter samples are medium fired with a slight dusty feel. Rare brown and black fine sand-sized inclusions are visible with low levels of fine fraction mica, mostly silver with rare gold-silver mixed samples. Only one diagnostic sample was recorded within the Special Deposit South, a plain Phylakopi I-iii type cup with a small circular stud just below the rim.

No further comment can be offered on Broodbank's suggestion that this macroscopic group was related to a possible volcanic source, namely Melos or Thera. The Melian parallel for the lone diagnostic cup would seem to strengthen this proposal, but due to the very small number of sherds recovered in this macroscopic fabric, no petrographic or chemical samples were taken for further analysis that might have demonstrated compatibility with volcanically derived sediments.

The range of fine fabrics present within the Special Deposit South assemblage is significantly greater than the Dhaskalio assemblage, with a correspondingly large number of vessel types. A summary of shapes and the macroscopic fabrics in which they appear is given in Table 6.4.

The petrographic study of the Special Deposit South ceramic assemblage

The earlier petrographic study of the 1987–88 assemblage from the Special Deposit North at Kavos (Hilditch 2007, 238–63) offered a valuable means of testing the coherence of the extensive macroscopic study by Broodbank, and provided a more detailed discussion of possible provenance for the large range of fabrics found at Kavos. This study confirmed many of the macroscopic categories defined by Broodbank as coherent groups with respect to composition and technology, adding weight to his arguments for potential provenance for most macroscopic groups. The petrographic study of the 2006–08 ceramic assemblage from Dhaskalio and from the Special Deposit South is significantly larger, with 291 samples taken in total. A range of sherds taken from the trench material discussed in detail here, as well as catalogued sherds and limited numbers of ceramic special finds (metallurgical ceramics and zoomorphic vessels) were sampled from a wide selection of trenches across the site, including Trenches B1, B3, B4, C1, D1, D2 and D3 from the Special Deposit South, Trench P01 from Kavos Promontory and Trenches AC and BA from the Middle Area.

Several fabric groups identified and described within the 1987–88 publication for the Special Deposit

North are present within this study. However, where descriptions for the same group differ between volumes, the more robust sample size and integrated macro-micro identification should mean that all descriptions published here supersede those of the 2007 volume.

The results of the petrographic study (which, as noted above, include samples both from Dhaskalio and from the Special Deposit South) are fully discussed in Volume III. The present synopsis will focus upon the material from Kavos. First, however, it will be useful to summarize briefly the results of the petrographic analysis and their relationship to those based on the visual classification into fabrics which has been discussed above. The main petrographic groups are classified by the nature of the dominant inclusion types with a number of subgroups reflecting the overall variation within these broad categories. They are identified as follows:

P1: Meta-quartz and granite (15 subgroups: A–O)

P2: Schist and mica-schist (8 subgroups: A–H)

P3: Volcanic (12 subgroups: A–L)

P4: Phyllite and marble (3 subgroups: A–C)

P5: Talc

P6: Calcite

P7: 'Loners' (not relevant to the Special Deposit South subset)

P8: Fine wares (6 subgroups: A–F)

It should be noted that some fine-wares also gave informative results on microscopic examination of petrographic sections. The relationship between the new petrographic classification based on microscopic analysis of thin sections, and that of the preliminary macroscopic analysis, is given in Table 6.5.

The subgroups represent distinctive variations within the general classes. For example, within the Volcanic class there are 12 subgroups: subgroup P3A is characterized by a calcareous clay containing microfossils with inclusions composed of rhyolitic-type volcanic rocks and devitrified glass; subgroup P3D contains samples containing well-sorted volcanic rock sand temper composed of large zoned feldspar crystals and lava particles; subgroup P3J has a very fine clay matrix rich in tiny muscovite mica laths, again tempered with volcanic rock particles; subgroup P3L is characterized by volcanic rock inclusions of andesitic-type composition within a non-calcareous clay matrix. It is likely that these subgroups reflect multiple production units, with some possibly utilizing similar raw material sources, across the Cyclades and beyond. The full extent of compositional and technological variation within the subgroups is discussed in Volume III.

The increased resolution at petrographic level, perhaps inevitably, provides a greater range of classifications than those defined at macroscopic levels. However, this does not render macroscopic analysis futile, rather it provides a clearer range of potential interpretations for each macroscopically defined group, which is a valuable tool for archaeologists working in the field. Assemblages cannot be assessed petrographically on a sherd-by-herd basis, so thin section provides greater resolution for a representative sample of sherds with respect to composition and technology, which can then be integrated into typo-stylistic and macroscopic fabric classifications. Within this study, the coherence of the macroscopic groups will be discussed to assess how accurate our observations in the field can be, as well as considering the degree of paste standardization within early bronze age pottery production in the Cyclades and the potential for multiple production units exploiting similar raw materials to produce technologically distinct fabric pastes.

It is possible to summarize the petrographic study with particular emphasis on the Special Deposit South material. In total, six major categories, or fabric classes, represent the coarse-medium samples analysed from the Special Deposit South, with the fine wares forming discrete groups of their own in most cases. These categories can be summarized as follows.

P1. Quartz (Meta-quartz and granite)

These coarse-medium groups were expected to provenance predominantly from Naxos, given the petrographic parallels from Late Neolithic/early bronze age material at Zas Cave and Grotta (Hilditch 2005a,b), and the later MBA site of Mikri Vigla. However, the large number of petrographic fabrics in which samples characterized as V1A or V1B appear shows that at greater resolution there are significant compositional and technological features that can indicate specific production units. Given the range of variation beyond current comparanda on Naxos, we may also consider similar raw material sources on Paros, Amorgos and other Cycladic islands with coarse-grained quartz-rich igneous intrusions.

Coarse to medium wares within this petrographic class are mostly large vessels, such as pithoi, miscellaneous storage jars with different neck types, basins, baking pans and braziers. There are less common instances of one-handled tankards, pyxides, multiple-headed lamps and jugs. The distinctive multiple-headed lamps appear exclusively within the petrographic subgroups P1F and the *Calcite* fabric subgroup P6A, which suggests a 'local Keros Triangle' source on Amorgos due to the presence of patelia inclusions. The semi-fine fabrics (subgroups P1K–P1O) are undoubtedly related to the coarse-medium production, and contain more than a few saucers, jugs, conical-necked jars, reinforcing the potentially local 'Keros Triangle' production of supposedly exotic shapes.

P2. Schist & Mica-schist

This class was thought to comprise a range of fabrics predominantly from Ios and Naxos, and even Siphnos. Naxos may be the source of the more biotite-rich fabrics, as the southeast of the island is intercalated bedded marbles and pelitic schists. Petrographic comparatives from Skarkos on Ios (Hilditch & Kiriati 2005) contain

Table 6.5. *The macroscopically identified fabrics from Keros with the petrographic fabrics, as identified through microscopic thin-section analysis, which have been identified in each.*

Macroscopic fabrics	Petrographic fabrics
V1A	P1a, b, c, e, f, i, j; P2c, d, h; P3a, b; P6
V1B	P1c; P3a
V2A	P1j, P3d
V2B	P1a, b, c, f; P3a, b, i, l; P4b
V2C	P1a–h; P3a, c, d, g, h, l; P4a; P7
V3A	P4a, b
V3B	P4a, b; P6
V4	P4b, c
V5	P1e, f, j; P2a, b, d, f, g
V6A	P1f; P2a
V6B	P1f; P2d, e, f
V6C	P2a, b, d, e; P6
V6D	P1f; P2a, d
V7A	P6
V7B	P1f
V7C	P1c, f, l
V8	P5
V10	P1f; P3e, k
V11	P1f; P2c; P6
V12	P3a, f, h, i
V13	P1a, b, c, e, j; P2g
V14	P1h; P7

garnet-mica schists with distinct marl/micrite inclusions within the coarse and fine fraction, and correlate to subgroup P2E within this study. The presence of glaucophane schist in subgroup P2B may hint at other high-metamorphic zones beyond Ios, as no parallels for this fabric have been observed within the Skarkos assemblage to date. Currently, there are Cycladic islands with contemporary sites, such as Chalandriani and Kastri on Syros, that remain almost entirely unknown with respect to available potting raw materials. No Cycladic parallels have been identified for the lone chlorite schist fabric (subgroup P2H), though the coarse temper texture is somewhat reminiscent of the Cretan/Minoan tempering tradition.

The subgroups of this fabric appear to be easier to spot in hand specimen (smaller range of macroscopic groups) but there is considerable overlap between the variants of the Micaceous Quartz and Micaceous Other macroscopic groups, reinforcing the difficulties in considering provenance at the macroscopic level only.

P3. Volcanic

There are important divisions within this category, the most prominent of which is the distinction between the calcareous-fossiliferous, calcareous-non-fossiliferous and non-calcareous. It is likely that, given the EB II occupation of the site and that the calcareous-fossiliferous fabric also appears in the earliest Phase A deposits on Dhaskalio, this subgroup (P3A) is related to ceramic production on Thera, where early production of pale volcanic wares has been confirmed (Vaughan 1990). There may still be a pale fossiliferous component coming from Melos, or Aegina, in the later

Phase C, but this requires further consideration at the chemical level too. There were no Special Deposit South samples within the calcareous-fossiliferous fabric, reflecting the dearth of Pale Volcanic (V12) macroscopic samples too, a feature in stark contrast to the material from Dhasaklio. The calcareous-non-fossiliferous and non-calcareous fabrics may possibly come from Melos or Aegina. There are two samples from the Special Deposit South that bear strong similarities to the andesitic fabric typical of early bronze age Aegina (Kiriati, Georgakopoulou & Pentedeka 2011); the others lie on the wide spectrum of acidic volcanic fabrics from Melos, which can be rich in obsidian, ignimbrite and pumice, and have already been shown to be far from homogeneous at Phylakopi (Vaughan & Williams 2007).

Shapes are diverse, as the Quartz category, including bowls, cooking pots and pans, miscellaneous jars, pithoi, jugs and rare pyxides and depas cups. The latter may suggest local imitation of such exotic shapes.

P4. Phyllite and marble (dark/red Phyllite)

These fabrics are dominated by phyllite inclusions of various types. P4A contains the characteristic iron-manganese phyllite inclusions, known on Amorgos as 'patelia', and matches the fabric identified at early bronze age Markiani (Vaughan 2006). Although this fabric is easily recognized in hand specimen, variation does exist with respect to inclusion density and the relative percentage of angular to subangular calcite inclusions and optically active reddish shale inclusions. It is uncertain whether this reflects chronological variation throughout the early bronze age or perhaps the existence of more than one production unit within the vicinity of Markiani on Amorgos. One of the Calcite fabrics (P6A) also displays the distinctive 'patelia' inclusions, possibly representing the opposite end of a heterogeneous continuum composed of patelia and calcite inclusions.

Shapes are relatively broad, incorporating bowls, cooking pots, pans, pyxides and jars, so could form a discrete ceramic set that travelling groups may have brought with them whole. No imitation of 'exotic' shapes has been noted, though it is questionable whether this reflects upon the limitation of the local raw materials or the unwillingness of local communities on Amorgos to engage in such behaviours.

P5. Talc

There is absolute correlation between the observed macroscopic and petrographic fabrics. Canonical Talc ware is easily recognizable, with hardly any internal microscopic variation—a single source is once again suggested, though no further evidence is offered to support Siphnos over any other talc source within the region (see discussion in Vaughan & Wilson 1993; Vaughan & Williams 2007, 118–19). Geological reconnaissance on Naxos by Dixon (Volume I) also revealed isolated talc deposits in southern Naxos, though whether these deposits could have served as potential raw materials for potting has yet to be investigated experimentally. Given the large range of other materials sourced from Naxos present at Dhaskalio, these talc deposits deserve further attention.

Vessel shapes are relatively broad, including a baking pan, various jars and a tray, but this may be comparable to other sites during the early bronze age (Akrotiri, Phylakopi, Ayia Irini). However, Talc ware is extremely rare within the Special Deposit South material and so no samples specifically from these deposits were sampled for petrographic analysis.

P6. Marble and Calcite

There is considerable variation within this category, as it appears that compositionally different raw materials were deliberately tempered with crushed calcite, reinforcing the regional tradition of calcite tempering throughout the Cyclades, and beyond, during the early bronze age. There are strong links to Amorgos for one of

the variants (P6A, see Phyllite and marble discussion above), which represents the end spectrum of one of the Dark Phyllite subgroups. Otherwise, it is difficult to give any further detailed information on provenance from specific islands, as the different clays used create lone samples rather than coherent compositional groups.

Several samples of multiple-headed lamps from the Special Deposit South correspond to this fabric category, as well as a cooking pot and a bowl, reinforcing that not only prestige fine wares were found within the Kavos material.

P7. 'Loners'

No members of this group were observed in the Special Deposit South data subset.

P8. Fine fabrics

The main subgroups of this category reflect general characteristics, as the lack of coarse fraction inclusions makes further separation extremely difficult. Subgroup P8A contains relatively high-fired samples, fired within an oxidizing atmosphere, with fine fraction quartz and/or feldspar, low to moderate amounts of fine mica laths and some visible decomposition of calcareous material. Subgroup P8B contains low- to medium-fired samples with a high presence of fine mica laths and occasional clinzoisite and fine shell fragments. The final subgroup, P8C, has virtually no visible inclusions within the matrix, displays high-fired matrices and prominent evidence for decomposed calcareous material. These petrographic profiles are difficult to relate to the coarse fabrics of the study and so correlations with the NAA analysis will be valuable for assessing the coherence of these subgroups with respect to raw material sources and processing behaviours.

The study of the Special Deposit South ceramics by neutron activation analysis

The petro-chemical study is presented in full within Volume III, but a short summary of the Special Deposit South samples is given here. In total, 44 samples from the Special Deposit South petrographic samples (41 fine wares and 3 medium wares) were studied for their chemical trace element composition with neutron activation analysis. The resulting chemical trace element compositions were statistically evaluated using hierarchical cluster analysis and principal component analysis to investigate the chemical variation of the assemblage and the identification of possible chemical reference patterns. Furthermore, the data were included in the ceramic database of the Institute of Materials Science at the National Center for Scientific Research 'Demokritos' (Hein & Kilikoglou 2011) for comparison with ceramics from other sites in the vicinity and the wider Aegean region.

In order to assess the chemical variability of the data set, the total variation was determined and found to be quite high (4.11), indicating a comparably inhomogeneous pottery assemblage in terms of chemical composition. Seven distinct chemical groupings were identified, of which four matched known reference groups, as well as five non-clustering chemical loners. Using the ceraDAT database

(Hein & Kilikoglou 2011), a number of parallels with known reference groups were identified within the Special Deposit South material, including Melos, Akrotiri on Thera, Naxos and the Argolid. A group that could indicate an ophiolitic source was also identified within the Special Deposit South material. No firm provenance has been suggested for this group, though a number of parallels with sauceboats within the Ayia Irini Period II assemblage have been highlighted, particularly among Yellow Mottled, as well as Urfirnis and Orange Buff Fine Painted (see Wilson 1999 for ware definitions). All of the samples in the Fine Dark Green-Brown Micaceous macroscopic group are currently unprovenanced according to the chemical data, but, interestingly, they overlap in several chemical groups with sherds of the Fine Dark Buff-Grey Micaceous group, suggesting a possible relationship with respect to raw materials, if not specific production location. Two medium coarse Quartz (V1) samples revealed strong similarities with a known Naxian reference group, strengthening the proposed level of imported pottery from the Keros Triangle and reducing the likelihood that the Quartz group reflects a local tradition within the vicinity of Dhaskalio-Kavos.

Implications of the Special Deposit South fabric study

The central question remains whether pottery production took place on Keros, either within the vicinity of Dhaskalio-Kavos or at another location on the island. At the macroscopic level, inconsistencies in inclusion and clay groundmass composition render establishing a local potting tradition more difficult still, allowing only broad consideration of compatibility with geological units documented within the region. Despite these limitations, some interesting observations can be drawn from the ceramic assemblage, in particular the coarse and medium wares, and we can relate these to the local geological setting to discuss ceramic production *vs* consumption practices. The Special Deposit South assemblage contains a significantly higher percentage of fine wares than the Dhaskalio assemblage (approx. 52 per cent *vs* <5 per cent respectively) and also lacks the clear chronological phasing of occupation seen on the opposite islet, so it would seem impractical to repeat here the detailed discussion of production *vs* consumption based upon the Dhaskalio material (see Chapter 23, Volume I). Instead, this discussion will focus on the Special Deposit South assemblage and contrast these interpretations with the earlier work by Broodbank on the Special Deposit North.

In contrast to Dhaskalio, the material from Special Deposit South is here counted by sherd, not by vessel. Obviously this may affect the representation of some fabrics within the Special Deposit South assemblage as, generally, poor preservation did not allow multiple sherds from the same vessel to be identified, and indeed old breakages spread across multiple trenches will not have been recognized in every instance. Nonetheless, the relative frequencies of each macroscopic fabric are fairly robust, given that many of the studied contexts consisted of whole trench deposits. Within the Special Deposit South, only diagnostic sherds were included in the counts, which may have additionally skewed the data against the plain, non-diagnostic body sherds of large vessels (storage jars, basins, cooking pots, baking pans, etc.), perhaps compounded further by the lower frequency of these vessel types within the Special Deposit South in general (see Volume V for a detailed account of coarse, medium and fine wares within each context). However, the relative frequency percentages of macroscopic fabrics within the coarse-medium and the fine categories should still provide a useful indicator of divisions within each category.

Within the Special Deposit South material studied macroscopically, Trench D1 contains 17 coarse-medium macroscopic fabrics and 10 fine fabrics (see Table 6.6 for a comparative summary). In comparison, Trench D3 contains 20 coarse-medium and 11 fine fabrics. Both trenches show the Sandy variant C as their most frequent coarse-medium macroscopic fabric, with Fine Grey and Fine Hard Blue-Grey appearing most frequently within the fine fabrics. If we compare the range of fabrics found within the 2006–08 excavated material from Dhaskalio-Kavos with the 1987 study of the Special Deposit North (both surface and trench material), there is broad compatibility with respect to the range of macroscopic fabrics, both in the coarse-medium and fine groups (variants of larger macroscopic groups, i.e. Blue Schist Platey, Dark, and Mixed, were not quantified within the 1987 study, though they were included in the detailed typo-stylistic correlations). In addition, a few macroscopic groups defined by Broodbank were not replicated within this study, and *vice versa*. The most significant new appearances within the 2006–08 Dhaskalio-Kavos material are the Pale Volcanic (V12), Granite (V13), Fine Grey (possibly the equivalent of a variant of Broodbank's Fine Grey) and Fine Hard Blue-Grey (a variant of Broodbank's Fine Hard Grey) macroscopic fabrics.

Another factor strengthening the broad compatibility between the 1987 and 2006–08 assemblages is the close correlation of vessel shapes within each

Table 6.6. Comparison between the Special Deposit South (SDS) and Special Deposit North (SDN) assemblages with respect to macroscopic fabric relative frequency. S: surface; T: trench material; Tables 6.4 & 6.5, 2007). Percentages are expressed to one decimal place and so may not total 100 per cent. Values are only given for the Special Deposit North where they correspond to groups within the 2006–08 Special Deposit South excavated material, otherwise they are not comparable (NC).

Relative frequencies (%)		SDS		SDN		
		D1	D3	S	T	
COARSE/MEDIUM FABRICS	Quartz	V1A	2.1	1.7	24.1	14.0
		V1B	3.1	1.2		
	Sandy	V2A	–	0.6	22.2	32.5
		V2B	4.4	9.4		
		V2C	12.1	12.2		
	Dark Phyllite	V3A	0.5	0.3	13.2	7.2
		V3B	2.1	0.2		
	Red Phyllite	V4	0.5	<0.1	5.6	3.3
	Micaceous Quartz	V5	4.8	4.5	13.2	13.0
	Micaceous Schist	V6A	0.7	0.3	3.0	4.9
		V6B	0.7	0.1		
		V6C	1.4	4.3		
		V6D	–	0.3		
	Calcite	V7A	7.5	0.8	5.7	5.5
V7B		6.8	8.0			
V7C		1.0	1.9			
Talc	V8	0.2	<0.1	0.8	0.2	
Dark Volcanic	V10	–	0.1	0.3	0.1	
Non-micaceous Phyllite-Schist	V11	0.5	–	NC	NC	
Pale Volcanic	V12	–	<0.1			
Granite	V13	0.4	0.3			
Fine Buff with Temper	V14	–	–			
FINE FABRICS	Fine Buff		4.4	7.6	2.0	5.2
	Fine Dark Buff-Grey Micaceous		0.9	1.5	0.6	1.2
	Fine Mottled		0.7	1.9	1.1	2.2
	Fine Grey		14.2	13.7	NC	NC
	Fine Dark Grey		2.7	3.1	NC	NC
	Fine Hard Blue-Grey		15.5	12.2	NC	NC
	Fine Orange		7.5	8.2	1.4	1.9
	Fine Red-Brown		2.8	3.7	NC	NC
	Fine Dark Green-Brown Micaceous		0.4	0.6	NC	NC
	Fine Pink		2.1	1.1	NC	NC
	Fine White		–	<0.1	1.4	2.6

shared macroscopic fabric. For the Quartz fabric (V1A and V1B), a broad range of large and small vessels are found within both the Special Deposit South and the Special Deposit North deposits (miscellaneous jars, pithoi, bowls, hearths and cooking pots, pyxides, conical-necked pedestalled jars, one-handled tankards and multiple headed lamps). The Sandy

fabric displays the widest range of large and small vessels within the Special Deposit South. In the Special Deposit North, the medium Sandy macroscopic fabric corresponds to a more limited repertoire of medium-sized shapes, such as collared jars, bowls, wide-mouthed jugs, multiple-headed lamps and sauceboats. Interestingly there are no large storage

or cooking vessels, in contrast to the Special Deposit South assemblage.

The distinctive Dark Phyllite fabric (the Blue Schist of the Special Deposit North assemblage) reveals a broad range of shapes within the Special Deposit North, including several jar types, a baking pan, a one-handled tankard and a depas cup (the last two both Kastrı Group shapes). Broodbank comments that the Platey variant (equivalent of V3A in this study) has the fewest corresponding shapes, a pattern echoed within the Special Deposit South assemblage. The Special Deposit South assemblage also reveals a different suite of shapes for each of the two variants. In this instance, even though the relative frequencies and chronological phasing cannot be used for strict comparison, the typological picture seems to reinforce the similar appearance and behaviour of this fabric across the two assemblages.

The Red Phyllite (Red Schist in the Special Deposit North assemblage), Micaceous Quartz, Micaceous Other and Dark Volcanic (Biotite in the Special Deposit North assemblage) macroscopic fabrics all follow the same distribution pattern with regard to shapes, where the Special Deposit South and Special Deposit North assemblages reveal a wide range of domestic shapes, such as jars, bowls, braziers or baking pans, in addition to small drinking or pouring shapes (including sauceboats and Kastrı Group shapes), multiple-headed lamps and pyxides. For the Talc macroscopic fabric the opposite is the case: extremely limited numbers and shapes appear in this distinctive macroscopic fabric within the Special Deposit South and Special Deposit North assemblages. The Calcite fabric is represented by only 'domestic' shapes within the Special Deposit North material, but presents a much wider repertoire within the Special Deposit South (multiple-headed lamps, pyxides, sauceboat). As mentioned above, the Non-Micaceous Phyllite-Schist, Pale Volcanic, Granite and Fine Buff with Dark Temper fabrics do not appear within the Special Deposit North study. This is reflected to some degree in the much lower frequency of these fabrics within the Special Deposit South assemblage.

Within the fine macroscopic fabrics, there are some interesting correlations with respect to vessel shape. For instance, the vessels in the Fine Mottled, Fine Hard Blue Grey and Fine Pink groups are almost exclusively sauceboats, the Fine White is only associated with a Phylakopi I-iii type cup and the Fine Red-Brown is the only fine fabric to contain multiple 'Anatolianizing' shapes of the Kastrı Group. The sauceboat and pyxis are found within the greatest range of fine fabrics, followed by the conical-necked jars of Syros-type, jugs and one-handled footed cups.

The Fine Buff displays the greatest range of shapes (including unique shapes such as the krateriskos, kylix and multiple-headed lamp), but does not contain any diagnostic Kastrı Group shapes. In terms of vessel shapes, Fine Buff, Fine Grey, Fine Dark Grey and Fine Dark Buff-Grey Micaceous all display a range of different shapes. However, diagnostic shapes of the Kastrı Phase appear mostly within Fine Orange, Fine Dark Buff-Grey Micaceous, Fine Green-Brown Micaceous and Fine Red-Brown groups, rather than the fine fabrics associated with a wide range of shapes (see Table 6.4).

Only five from a total of 11 identified groups correspond between the 1987 and 2006–08 Special Deposit assemblages and can, therefore, be discussed with respect to typo-stylistic criteria: Fine Buff, Fine Dark Buff-Grey Micaceous (Fine Dark Buff Micaceous in the Special Deposit North), Fine Mottled, Fine Orange and Fine White. Of these, only three are also found at Dhaskalio: Fine Buff, Fine Dark Buff-Grey Micaceous and Fine Orange. The pyxis and sauceboat appear in all of these fabrics within both contexts of the 2006–08 excavations.

For the Fine Buff and Fine Orange fabrics, the same pattern can be observed; in both cases, the Special Deposit South and Special Deposit North assemblages contain similar shapes within a fairly broad repertoire. For the Fine Buff fabric, the pyxis is found in both contexts, with the sauceboat appearing consistently within the Fine Orange fabric. In the Fine Dark Buff-Grey Micaceous fabric, both the Special Deposit South and Special Deposit North assemblages display a relatively broad repertoire of shapes, featuring sauceboats alongside typical Kastrı Group forms. The remaining two fine fabrics show contrasting typological patterns. The sherds in a Fine Mottled fabric within the Special Deposit South and Special Deposit North assemblages appear almost exclusively in a single shape, the sauceboat, with only a lone one-handled footed cup appearing within the Special Deposit South assemblage. By contrast, the Fine White fabric has only a single shape within the Special Deposit South assemblage, a cup of Phylakopi I-iii type, but a large range of shapes within the Special Deposit North assemblage, including a necked jug, sauceboats, pyxides and a possible zoomorphic vessel. However, it is possible that this discrepancy indicates a less than perfect correlation between Broodbank's Fine White macroscopic group and the one presented within the 2006–08 material.

Let us now turn to the issue of provenance for the macroscopic fabrics. Four zones of provenance are discussed for the macroscopic fabric categories: i) Keros, to highlight possible local fabrics; ii) Keros Triangle,

Table 6.7. Suggested origins for the macroscopic fabrics identified within the 2006–08 Keros excavations.

Macroscopic fabrics	Sub-group	Keros	Keros triangle	Cyclades & Aegina	Other
Quartz	1A				
	1B				
Sandy	2A				
	2B				
	2C				
Dark Phyllite	3A				
	3B				
Red Phyllite	4				
Micaceous Quartz	5				
Micaceous Schist	6A				
	6B				
	6C				
	6D				
Calcite	7A				
	7B				
	7C				
Talc	8				
Dark Volcanic	10				
Non-micaceous Phyllite-Schist	11				
Pale Volcanic	12				
Granite	13				
Fine Buff with Temper	14				
Fine wares	FW				

as defined by Broodbank in 2007 to include Naxos, Ios and Amorgos and the smaller islands nearby; iii) the wider Cyclades, also including Aegina; and iv) Other, as a general designation for Greek Mainland, Crete, other Aegean islands and western Anatolia. An overview of suspected provenance for each macroscopic fabric is shown in Table 6.7.

If geological compatibility of each macroscopic fabric is correlated with the relative frequency of

Table 6.8. Minimum and maximum possible percentages for provenance, based on broad geological compatibility, within the Special Deposit South assemblage.

	SDS			
	D1		D3	
	Min	Max	Min	Max
Keros	0	23.9	0	21.7
Keros triangle	16.7	48.6	14.7	46.2
Cyclades & Aegina	0.2	59.4	0.3	63.8
Other	0	51.2	0	53.7

each macroscopic fabric, then a range of minimum and maximum values for potential local production and suspected imports can be suggested. These values are outlined in Table 6.8. The two trenches of the Special Deposit South show strikingly similar values, whereas the different occupation phases of Dhaskalio show more variation (Table 23.24 in Volume I). With respect to possible local production on Keros, the Special Deposit South values are similar to those of Dhaskalio, with a minimum of 0 per cent and a maximum between 18.2 and 23.9 per cent. For production within the Keros Triangle there is a difference between the Special Deposit South and Dhaskalio values, with the latter revealing twice the potential for representing multiple production centres within this zone, up to 85.6 per cent in Phase A with a low of 26.7 per cent, compared to 48.6 per cent and a low of 14.7 per cent within the Special Deposit South. The Special Deposit South might be slightly lower as the fine wares have been lumped together, rather than recognizing the potential for each fine fabric to provenance within this region. For most islands within the Keros Triangle the possibility of a local fine ware remains a slim one, with

perhaps Naxos and Ios presenting the best candidates for the fine quartz-bearing (P8A) and micaceous (P8B) fabrics respectively. If we widen the net to include all islands of the Cyclades, then the Special Deposit South shows slightly higher maximum values than Dhaskalio but also lower minimum values too, again possibly because the lumping of the fine wares is causing a skewed distribution (the fine fabric relative percentage is after all 51.2 per cent and 53.7 per cent within the Special Deposit South trenches!). Lastly, the Special Deposit South material presents the potential for much higher levels of imports from beyond the Cyclades than the Dhaskalio assemblage, underlining once again the identification of different typo-stylistic and fabric patterns between the SD assemblages and Dhaskalio.

The initial interpretation that Kavos may represent a site with acute differences in human use and material culture deposition to the opposite islet site of Dhaskalio would seem to bear out in fabric terms. The macroscopic fabric study has served to reinforce the connection between the two sites with respect to possible provenance of the excavated ceramics, as most coarse–medium fabrics are found within the

Special Deposit South and Dhaskalio assemblages. However, the material from the Special Deposit South effectively constitutes a higher-value deposit, as within each macroscopic fabric there is generally a wider repertoire of shapes (but which still includes some so-called ‘domestic’ wares) and a higher probability of those vessels coming from some distance away, as their fabrics are not obviously compatible with the local suite of raw materials. More detailed consideration of these issues of consolidation with respect to the fine wares, the overall coherence of these macroscopic fabrics with respect to composition and compatibility of raw material sources and locations for possible production activities, is given in Volume III.

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