



McDONALD INSTITUTE MONOGRAPHS



The Marble Finds from Kavos and the Archaeology of Ritual

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

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

ΙΣΝ/SNF

ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ
STAVROS NIARCHOS
FOUNDATION



INSTAP

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with contributions from

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practice: the excavations of 2006–2008
VOLUME III

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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.

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

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Abbreviations

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

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

Preface

Colin Renfrew & Michael J. Boyd

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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Chapter 10

The Conclusion of the 2006–08 Project: The Origins of Aegean Ritual Practice

Colin Renfrew

Introduction

The evidence gathered in this, and the previous two volumes, makes it possible now to review the nature of the two Special Deposits at Kavos, along with the accompanying settlement at Dhaskalio, and to recognize these as together forming a centre of congregation. This had a regional influence, involving many or most of the Cycladic islands, and perhaps extending beyond that region. The implications of the development of this first regional ritual centre in the Aegean will now be considered.

Here it is possible to review the excavations of 2006 to 2008, along with the earlier work at Kavos, and to recognize that, despite the loss of information from the episode of looting in the Special Deposit North in the 1950s, some firm conclusions can be reached. Drawing on the concluding chapters of earlier volumes (chapter 34 of Volume I and chapter 23 of Volume II) it seems that a coherent picture begins to emerge. That picture is summarized in this section with reference first to the two Special Deposits and then to the settlement at Dhaskalio, still joined with Kavos with its two ritual deposits in the early bronze age by a natural causeway. In the following section, however, several underlying problems are addressed which might call into question the outline reconstruction presented in the Introduction to this volume, Chapter 1, and throughout this chapter further questions will be emphasized which do not yet have a clear answer. It is hoped that some of these will be addressed in the new phase of excavations at Dhaskalio recently undertaken.

(a) *The Sanctuary at Kavos*

In the first place the project was able definitively to establish the status of Kavos as a special locus of ritual deposition, operating over several centuries, and in that sense a sanctuary. This had been suspected since the first systematic researches in what is now called the Special Deposit North in 1963, but could not be

definitively established until finds were systematically excavated in undisturbed contexts in the Special Deposit South, lying 110 m to the south, in 2006. Those finds, mainly of choice marble sculptures and vessels, along with specific ceramic forms, had been deliberately broken before their deposition. This could now be identified as the earliest regional sanctuary in the Aegean, and indeed apparently the first maritime sanctuary in the world (Renfrew *et al.* 2012)—maritime, in the sense that it is located by the sea, and accessible only by sea.

The excavations in the Special Deposit South at Kavos revealed this as an essentially undisturbed ritual deposit, formed by successive depositions over several centuries, of carefully selected materials, which in nearly every case had been subject to deliberate breakage. It was then possible to conclude that this breakage did not take place at Kavos, nor indeed elsewhere on Keros. Instead, the material to be deposited was brought in each case, already in fragmentary condition, perhaps in bags or baskets, from other Cycladic islands, and placed at the selected location at the Special Deposit South. The material in question consisted of broken pottery, fragmented stone vessels and broken Cycladic sculptures, together with deliberately fractured cylindrical spools of selected stone or of *Spondylus* shell, along with damaged obsidian blades and broken stone discs (although it is not clear that obsidian blades and stone discs were subjected to the same systematic breakage as the ceramic and marble objects: see Volume II, 285, 299). These finds were reviewed in Volume II (*Kavos and the Special Deposits*), and the finds of marble presented in the present volume.

Earlier work at the previously looted Special Deposit North had revealed finds of a similar character, where it was again clear that most of the breaks on the fragmented marble vessels and sculptures were ancient breaks, rather than the product of recent looting processes. There are therefore good grounds for regarding the Special Deposit North as essentially sim-

ilar in character to the Special Deposit South, although it cannot be excluded that some marble vessels and sculptures found there were actually broken at that location, nor that some complete or nearly complete sculptures may have been removed by looters in the years prior to the first systematic excavations of 1963.

Wider investigations at Kavos in 2006–08 showed that these two Special Deposits were its principal features, and that they were not accompanied by significant buildings or other structures, although some limited indications of other activities were found in the area lying between them, designated the Middle Area (Volume II, chapters 15–21).

These findings clearly establish Kavos on Keros as a ritual centre of more than local significance. It was a centre of congregation serving a substantial region of the Aegean, namely the Cycladic Islands, also receiving material originating in mainland Greece and perhaps in western Anatolia (although not, apparently, in Crete). In that sense it was the first regional centre of congregation so far recognized in the Aegean, a ritual location of a general type which has been recognized in different parts of the world functioning at times prior to the local emergence of what may be termed state societies. It served as a centre for the neighbouring islands of the Cyclades from which the most numerous imports came. It may also have been accessed directly from mainland Greece and from western Anatolia, to the extent that materials from these locations reached Keros, although these more distant imports might first have reached other Cycladic islands and have been brought from there by island visitors to the sanctuary. These early centres of congregation seem to anticipate the first appearance of early religions involving the worship of specific deities which are found in state societies of more recent times. The latter were often used for the veneration of deities in a context of religious observance, a well-known example being the Cycladic island of Delos in the first millennium BC. The belief system shared by those visiting the sanctuary on Kavos from other Cycladic islands cannot perhaps be described as a religion, but it did involve rituals of deposition in which the iconography of the folded-arm sculpture and the use of marble ritual vessels played a significant role. The sanctuary on Delos in the first millennium BC, and perhaps earlier, was indeed dedicated to a specific deity, Apollo, which indicates religious developments not encountered on third-millennium Keros, yet the role of the centre of congregation on Keros at this time in developing a centralized interaction zone, or confederacy (see Renfrew 2013), may be seen in some respects to anticipate or foreshadow the later emergence of the Delian centre.

It is important to avoid anachronistic claims in seeing the sanctuary at Kavos on Keros as in some senses a predecessor of the Pan-Hellenic centre of Delos in the first millennium BC. It is clear that visitors from a number of Cycladic islands were coming to Kavos over several centuries during the third millennium BC, and bringing broken materials, deliberately fractured in the course of rituals on those islands, for deposition at Kavos. It was these activities that established Kavos as a ritual centre for the Cycladic islands, of a kind that has not yet been recognized elsewhere in the Cyclades. The standardized repertoire of artefacts involved, some of them of marble, is indicative of some communalities of belief. But we have been careful not to claim this belief system as a religion in the absence of any coherent evidence for a specific divinity, such as is so abundantly available 1500 years later on the more widely influential, indeed Pan-Hellenic, centre on Delos.

(b) The settlement at Dhaskalio

The finds on the islet of Dhaskalio are of a domestic character, an illuminating counterpart for those from the Special Deposits at Kavos. Dhaskalio lies 90 m to the west of Kavos and was originally joined with it by a narrow causeway, now submerged: it was clearly a substantial settlement. There are grounds for believing that its permanent population was small, perhaps of the order of 20 individuals (Volume I, 711), although a larger figure now seems possible in the light of the Keros Island Survey (Volume VI). But this population was augmented periodically by large numbers of visitors on the occasions when rituals of deposition were being conducted in the two Special Deposits. Evidence as to the place of origin of these periodic visitors is offered by the material found in the Special Deposits, since the pottery, like the marble artefacts, was brought from other islands (this volume, Chapter 7).

The well-preserved stratigraphy at the settlement on Dhaskalio allowed its occupation to be divided into three successive phases, each characterized by the accompanying pottery, used for domestic purposes, including storage. Comparison between the pottery from the Special Deposit South at Kavos and that from Dhaskalio showed that the bulk of the Kavos material was deposited during Phase A at Dhaskalio, with deposition continuing into the period of Phase B (Volume II, chapter 5). It was clear, however, that by the time of Phase C of the settlement on Dhaskalio the depositions at the Special Deposit South had, in effect, ended.

Radiocarbon determinations of samples from Dhaskalio (Volume I, chapter 33) indicate the duration of the successive phases of the settlement (Table 1), although it is perhaps possible that the settlement

Table 10.1. *Phases, culture groups and calendar dates at Dhaskalio.*

Phase A	Keros-Syros culture	2750–2550 BC
Phase B	Earlier Kastri Group	2550–2400 BC
Phase C	Later Kastri Group	2400–2300 BC

continued in use some years after 2300 BC, since the radiocarbon samples analysed may not have come from the very latest occupation of the site. But possible problems with this radiocarbon chronology are further discussed below.

One important activity at Kavos, beyond the ritual depositions in the two Special Deposits, was the practice of copper working at the location, lying some 120 m north of the Special Deposit North, designated Kavos Promontory. The copper ores smelted there were brought from elsewhere in the Cycladic Islands, and artefacts of copper and arsenical copper were produced from them. There are modest indications also of some metal working in some areas of the settlement on Dhaskalio, and it seems clear that the position of Kavos Promontory gave, on occasion, a suitable wind direction for the smelting process. This was clearly a practice associated with the periodic use of the settlement at Dhaskalio.

Some underlying problems in interpretation and field research

In the description above of the functioning of the sanctuary, the two Special Deposits are conceived as broadly equivalent in their roles. The evidence is better for the Special Deposit South, since this was, at the time of its excavation, undisturbed by looting. And certainly the two Special Deposits share many features: the lack of built structures, the abundance of sauceboats and conical-necked jars in the pottery, the fragmented marble vessels and sculptures, some of them very large, the absence of metal artefacts, and the occurrence of spools and of obsidian. The absence of accompanying human remains was well documented for the Special Deposit South by the application of water-sieving. There was indeed a small cemetery area in Area A immediately to the south of the Special Deposit South, which may well have served as a place of burial for the relatively small permanent population resident on Dhaskalio. It was mainly used during Dhaskalio Phase B, after the main period of use of the Special Deposit South. The presence of human remains in this small cemetery area does not contradict the clear conclusion, documented by water-sieving, that human remains were entirely absent from the contents of the Special Deposit South itself.

In the Special Deposit North a few fragmentary human bones were recovered, and this has been explained by accepting that there were a few undisturbed Early Cycladic cist graves in one part of the area (Volume II, chapter 14). The looting of the Special Deposit North and its surrounding area prevents a complete reconstruction of the circumstances: the view is taken here that there were indeed some Early Cycladic burials in this area, as evidenced by the few human remains discovered, but that most of the material recovered came from the Special Deposit North, which, like the Special Deposit South, probably did not contain human burials. The much better preservation of much of the pottery and of the marble found there has been explained by the presence there of deeper layers in the deposited material, favouring the preservation of the surfaces of marble and ceramic vessels.

There is, however, one difference between the two Special Deposits which cannot be explained in this way. That is the presence of many seemingly restorable marble bowls and vessels in the Special Deposit North. That contrasts markedly with the position in the Special Deposit South, where the marble bowls and basins were smashed to smithereens. The stone bowls and vessels from the excavations of 1963 and 1967 in the Special Deposit North formed the basis for the doctoral dissertation of Tania Devetzi (1992). But her preliminary study has not been followed by a more comprehensive publication, and until that emerges the material is not open to access for wider study. Fortunately such a study is now proceeding for the sculptures from the Special Deposit North (Volume VII; Sotirakopoulou *et al.* 2017) and the remaining sculptural fragments in the Naxos Museum can be taken fully into account. It seems clear that the sculptural fragments in the Special Deposit North were extensively looted prior to 1963, whereas it seems likely that the looters did not much concern themselves with marble vessels (although the impressive ‘bird dish’ in the N.P. Goulandris Museum of Cycladic Art seems to be a striking exception: Doumas 1968, 173, fig. 329). It seems likely that a sustained programme of restoration in the Naxos Museum would result in many completely or partially restored marble vessels, whereas it is clear that there are very few potential joins among the surviving sculptural fragments. This is perhaps the most striking difference when the assemblages from the Special Deposit South and the Special Deposit North are compared. For, as fully documented in Chapter 4 of the present volume, the marble bowls and vessels from the Special Deposit South are broken into very small fragments. It has not been possible to find joins among them to any significant extent. It is clear that the marble bowls and vessels

in the Special Deposit South were very much more damaged by fragmentation than those in the Special Deposit North. That is a significant difference between the two Special Deposits which has to be effectively explained. It should be noted that joins between the marble sculptures found in the Special Deposit South and those from the Special Deposit North curated in the Naxos Museum have been systematically sought during the work of Maniatis and Tambakopoulos, and no join deriving from the excavations in the Special Deposit North has been made with any fragment from the Special Deposit South (Volume II, 393). It has not been practicable to compare all the marble vessel fragments from the Special Deposit South with those curated in the Naxos Museum from the Special Deposit North, but it is the case that of those examined, no such join has yet been found.

There is also a second problem lurking beneath the scenario outlined in the Introduction to this chapter, where systematic breakage on other islands of ritually significant material is envisaged, undertaken before a part of that material was brought to Keros for systematic deposition. The question is: where, on those other islands, is the residue of this ritually fragmented material to be found? Certainly there are quite a few fragments of sculptures in some of the Cycladic cemeteries (Voutsaki 2007, 298), not least on Kouphonisi (Gavalas 2017). But where, other than at Kavos, have fragments of marble basins been found? (a basin, as defined in Chapter 4, being a bowl, usually with rolled rim, of diameter more than 300 mm). They are not a frequent feature of the Cycladic settlements: no basin fragment was found at Markiani on Amorgos (Scarre 2006, 176) and none on Dhaskalio (Volume I, chapter 26). A comparable problem holds for the sauceboat sherds found in the Special Deposits, as further discussed below. With the 'breakage on other islands' hypothesis outlined above (and in chapters 13 and 23 of Volume II), one infers that there should be surviving locations on other islands where systematic breakage was practised and where many broken marble artefacts and also sauceboat fragments could still be found. Such locations may well be observed in the course of future research: that would bring welcome support for the model outlined here. None has yet been located. It remains the case that few Early Cycladic settlements have yet been extensively excavated; moreover it does not follow that the locations chosen for the execution of the suggested systematic procedures of breakage were situated within the Cycladic settlements. The possibility that the remainder of the deliberately fragmented material was discarded at sea cannot be excluded, but residues would probably have remained at the locations where the breakage had taken place.

A third problem is the lack of any known workshops where the sculptures and marble vessels were produced. For while it is possible that the small, schematic figurines were made in the settlements, as Marthari (2017) has suggested for the finds at Skarkos on Ios, the production of larger folded-arm sculptures, especially the very large ones, must have generated a good deal of workshop debris. No such occurrence has yet been recognized. Very possibly such marble production workshops would have been located in east-central Naxos or in southeast Naxos, since that is where most of the marble was probably quarried, as Tambakopoulos and Maniatis document in Chapter 5, above. It has not yet proved practicable to organize systematic site survey in order to locate such workshops: none was located in the Southeast Naxos Survey of 2015. There are clearly important discoveries which have yet to be made.

Enduring contrasts between the settlement at Dhaskalio and the special deposits at Kavos

The discussion at the end of Chapter 9 (see Table 9.2) brought out one of the most remarkable features to emerge from the excavations of 2006 to 2008. The dominant artefact types featuring in the two Special Deposits at Kavos are either rare or entirely absent from the settlement at Dhaskalio. This highlights the specialized nature of the artefacts whose deposition in the Special Deposits at Kavos is the most striking feature of the sanctuary on Keros. It is worth considering these more carefully.

The most frequent marble form in both the Special Deposits is the *rolled-rim bowl*. It is a shape not seen at all on Dhaskalio, although it is a frequent feature in the Early Cycladic cemeteries. Marble vessels are not common in the settlement, but examples of a few plain rimmed bowls are indeed found, serving to emphasize the complete absence of the rolled-rim form. Another form absent from the settlement is the *marble basin* (defined as a bowl of diameter greater than 300 mm). Fragments of such basins are frequent in both the Special Deposits. But this is of a size simply not encountered in the Cycladic cemeteries.

A comparable difference is found among the sculptures. The *folded-arm sculpture* or figurine is a dominant form in both the Special Deposits. Yet remarkably, not a single fragment of a folded-arm sculpture has been found at the settlement on Dhaskalio. Such sculptures are, of course, a common enough find in the Cycladic cemeteries. But here again a distinction of scale holds. The largest folded-arm sculpture from the Early Cycladic cemeteries comes from Tomb 10 at Spedos (Papathanasopoulos 1962, pl.

10α): it is 587 mm high. Yet in both the Special Deposits several sculptures are attested by fragments which, when complete, were significantly larger than this.

A similar polarity is seen among the pottery finds. The multiple-headed lamp is documented by 243 fragments in the Special Deposit South (and by many in the Special Deposit North also): not a single fragment has been found on Dhaskalio. Then the most abundant ceramic form at Kavos, the sauceboat, is represented by 5121 examples in the Special Deposit South and by only 35 sherds on Dhaskalio (mainly in Phase A), as further discussed below.

It is striking also that personal adornments, and indeed metal objects of any kind, are almost entirely absent from the Special Deposits (apart from one surface find of a silver pin in the Special Deposit North), although finds of copper and arsenic bronze are quite frequent in the settlement at Dhaskalio. The settlement at Dhaskalio yielded many domestic finds of various materials represented by types rare in the Special Deposits on Kavos: these included great quantities of domestic pottery and a range of ground stone tools. The finds in the Special Deposits were of a more restricted and narrowly defined repertoire.

These striking contrasts between the finds at Dhaskalio and those of Kavos document the consistency of the ritual practices which were followed over many years at the sanctuary.

Connectivity and Keros

The salient characteristic, both of the Special Deposits at Kavos and of the settlement at Dhaskalio, may be summed up as *connectivity*. These locations on Keros were a significant node in a network, a network of interactions which embraced the Cycladic Islands and certainly extended to the Greek mainland. Clearly it extended also to the Anatolian coast, although it is not yet clear how much pottery from that coast was reaching Keros. Very notably that network did not bring much material to Keros from Crete. At the time of writing no single import from Crete has been recognized, either in the settlement at Dhaskalio or in the Special Deposits at Kavos, although the study of the pottery from the Special Deposit South is not yet complete. On the other hand, the influence of the early bronze age Cyclades was extensively felt in Crete.

It should here be acknowledged that there is evidence for ritual activity in different areas of the Aegean already in the Neolithic period. But so far the evidence does not suggest that this was of much more than local significance: ritual interactions involving an entire region such as the Cyclades appear to emerge during the early bronze age, and specifically

with Keros. When discussing connectivity, reference should of course at once be made to the widespread occurrence of Melian obsidian in archaeological contexts in much of the Aegean, beginning as early as the late Upper Palaeolithic in the Franchthi Cave in the Argolid (Perlès 1987; 1990). For instance, indications of ritual activity are well documented in the later Neolithic at the cave of Zas on Naxos (Zachos 1999). Similar observations can be made for mainland Greece, for instance at Sarakenos Cave in Boeotia (Sampson 2008). Ritual activity, sometimes of a burial nature, is also documented during the Cretan Neolithic (Tomkins 2009). But the evidence for interaction and indeed connectivity at a regional level is perhaps most clearly seen in the Aegean at the sanctuary of Kavos.

The early bronze age presence of Cycladic settlers at Aghia Photia on the northeast coast of Crete has been much discussed (Davaras & Betancourt 2004; 2012). The principal imported shape, the incised ‘bottle’, of the Kampos Group frequently seen at Aghia Photia, is earlier in date than the inception of Phase A at Dhaskalio but interestingly it is well documented on Kouphonisi (Zapheirópoulou 1970a,b), very close to Keros. Yet it is in the marble Cycladic sculptures found in Crete from the EM II period and in their local Minoan imitations that Cycladic influence is most clearly seen. That does not establish direct contact between Keros and Early Minoan Crete in EM II. But the use of folded-arm sculptures in the burial rituals in some locations of Minoan Crete, both in the north, for instance at Archanes, and in the south, in the Mesara Plain, is richly documented (Stampolidis & Sotirakópoulou 2017). Cycladic influence is certainly felt in Crete in the local production of the Koumasa variety of the folded-arm figure, a variety which, as documented in Chapter 3, is totally absent from the Special Deposit South on Kavos. None has been reported from the Special Deposit North. It is interesting also that in several cases, most notably at Archanes (Papadatos 2005) where they are more numerous than complete examples, fragments of marble folded-arm figurines are found. These resemble in their broken condition many of the finds seen at Kavos. It is possible that, as with the Keros finds, they were deliberately broken. So the issue of thraumatology emerges again. The practice of depositing fragmented body parts of marble folded-arm figures is quintessentially a feature of the Kavos Special Deposits, yet it is seen again in Tholos Tomb Gamma at Archanes. Clearly there are ritual practices here which relate to seemingly complex belief systems involving parts and wholes, and episodes of deliberate fragmentation in which a complete artefact of a well-defined form is deliberately fractured to produce several parts from the initially complete

entity. There are issues of cognitive archaeology here which arise also in other regions of prehistoric Europe and beyond (Chapman & Gaydarska 2007).

Both our ceramic specialists Sotirakopoulou (Chapter 6) and Hilditch (Chapter 7) have concluded that most or all of the pottery found at Dhaskalio and at Kavos was imported to Keros. Much of it came from nearby islands. Some fabrics deriving from Amorgos may certainly be recognized which are particularly prominent there at the site of Markiani. Others came from much further afield. In particular the volcanic wares which are prominent in Phase C at the settlement at Dhaskalio are likely to have been imported from Thera or Melos, or possibly from the Saronic Gulf.

It is well established that most of the obsidian used originated in Melos, although a few fragments of obsidian from Giali in the Dodecanese are reported by Carter and Milić (Volume II, 271) from the Special Deposit South and from Dhaskalio, as well as five fragments judged on the basis of their appearance to derive from Anatolian sources (Volume I, 534).

As discussed in Chapter 5, much of the marble used for the marble sculptures and vessels originated in Naxos, where most of the workshops producing these choice artefacts may have been located. It should be remembered also that the good-quality marble widely used to construct the walls of the Hall and other buildings on Dhaskalio (as well as of the Doumas House at Kavos) was brought by sea, most probably from southeast Naxos (Volume I, 309). This must have required a prodigious labour of transportation, possibly on wooden rafts, unparalleled in Aegean prehistory, although comparable in some ways with the transportation from south Wales, possibly partly by sea, of the bluestones used in the construction of an early phase at Stonehenge in southern England, at roughly the same time.

A very specific instance of the ease with which materials were transported to Keros is the occurrence of two hand tools of metal slag (8309 and 10167), probably used for pounding, during Phase B at the settlement on Dhaskalio. It might have been supposed that these would be made of the slag generated at Kavos Promontory as a by-product of the smelting there of copper ores, themselves imported from the western Cyclades. But instead, as Georgakopoulou shows in Chapter 8 in her comparison of Kavos Promontory with Dhaskalio, these slags do not derive from Kavos Promontory, and it is instead likely that these two items of slag were brought to Dhaskalio from beyond Keros to be used as tools.

This discussion of connectivity, using the concept of Keros as located within a network, should not, however, obscure the issue of centrality. For it is clear

that the sanctuary at Kavos was indeed the focus for a number of the ritual activities undertaken by the Early Cycladic islanders. The finds there show that the sanctuary was indeed a symbolic attractor (Renfrew 2007d, 429), unlike any other. This point is documented by the special frequency of some of the ceramic finds as noted above, for instance the multiple-headed lamps, the conical-necked jars and, in particular, the sauceboats.

Insights from sauceboats

One specific question here raises a number of interesting issues. It is: where did the sauceboats so abundantly found at Kavos originate? Those found at Phylakopi on Melos have sometimes been regarded as imports to that site (Renfrew & Evans 2007, 142, 148; Williams 2007, 105–6), and those noted at Akrotiri on Thera have also been considered to be imports. Although there is a complete example from the cemetery at Aplomata (Philaniotou 2017) and a splendid painted example from Tomb 10 at Spedos (Papathanasopoulos 1962, 118, pl. B), not many sauceboat sherds have been reported from the excavations of Kontoleon at Grotta or Aplomata on Naxos. They occur at Skarkos on Ios, presumably as imports (Marthari 2008) and as imports also at Poros Katsambas in Crete (Wilson *et al.* 2008). Sauceboats are of course a *leitmotiv* of the Early Helladic II Korakou culture, so abundantly documented, for instance, at Lerna phase III. And in their neutron-activation study (this volume, Chapter 7 Appendix), Hein and Kilikoglou distinguish several groups that may derive from mainland Greece. But surely that can hardly apply to the majority of the sherds of this form, which is indeed the dominant shape in the pottery found in the Special Deposits on Keros. In his treatment of the sauceboat fragments from the Special Deposit North recovered in the 1987 excavations there, Broodbank (2007, 122) noted that some sauceboat sherds were of fabrics (e.g. Blue Schist, Sandy and Micaceous Quartz) probably produced locally at sites within the Keros triangle, while others (e.g. some of the Fine Buff) were of fabrics found at Aghia Irini on Kea, and possibly originating there. But many of those recovered were of fabrics (e.g. Fine Mottled) thought to originate in Attica or the Argolid, a conclusion now supported by the recent neutron-activation analyses on sauceboat sherds from Dhaskalio and the Special Deposit South.

In her consideration of the painted dark-on-light wares at Dhaskalio, Sotirakopoulou (Volume IV, 383) notes that painted sauceboats are plentiful in the Special Deposits at Kavos but scanty at other early bronze age sites within and outside the Cyclades, except at Aghia Irini on Kea (where most of the sauceboats are considered to be imported). The painted sauceboats

of Raphina in Attica were considered by Theocharis (1954, 74) to be the product of an Attic workshop, whereas Wilson (1987, 39) assigned them a Cycladic origin. In her discussion of the pottery from Dhaskalio, Sotirakopoulou (Volume IV, 35) notes that both Caskey and Wiencke appeared to consider the painted sauceboats at Lerna to be Cycladic imports. She concludes that the painted wares of the Keros-Syros culture (including also painted jugs and pyxides) were, like the conical-necked jars with stamped-and-incised decoration, primarily intended by their makers to be transported to the Special Deposits at Kavos (Volume IV, 383). This suggestion of the production of some artefacts primarily for the purpose of utilizing them in the rituals of deposition in the Special Deposits at Kavos is an important one. For it does remind us again that some forms (not just in the ceramics but of marble also) which were formerly known primarily from the Early Cycladic cemeteries are now in fact much more abundantly documented at the Special Deposits at Kavos, although they are found in fragmentary condition at Kavos. It does not, however, resolve the question as to where the painted sauceboats found at Kavos were actually made.

The problem is not dissimilar when the sauceboats found in other (unpainted) fabrics at Kavos, including Urfirnis, are considered. Sotirakopoulou (Volume IV, 34) notes Broodbank's conclusion (2007, 149) that the mottled sauceboats with ring bases, the high-quality Urfirnis ones and those with animal-head protomes came from the northeast Peloponnese, the mottled ones with pedestal bases from Attica and the rest from various Cycladic islands. This view finds strong support from the neutron-activation analyses of Hein and Kilikoglou published here in Chapter 7. Certainly the similarities of the examples with animal-head protomes with finds from the northeast Peloponnese were noted by Doumas (2007b, 367–73), although Sotirakopoulou herself (Volume IV, 34) would prefer a source somewhere in the Cyclades (see also Volume II, 317–18).

There is an emerging consensus, then, that many sauceboats found in the Special Deposits were produced in Mainland Greece, both in the northern Peloponnese and in Attica. But it is less clear where those produced in the Cyclades were actually made. The production of sauceboats in the Cyclades was clearly of quite wide significance if the dark-on-light painted examples found at Lerna and other mainland sites have been considered to be of Cycladic manufacture. It may well turn out to be the case that sauceboats were part of the ceramic production achieved on several of the Cycladic islands. Yet still no Cycladic island has been named where finds of sauceboats are so numer-

ous, or the fabric so characteristic as to suggest local production. So the situation remains somewhat enigmatic. Yet with the ongoing typological, petrological and neutron-activation studies of Sotirakopoulou, of Hilditch and of Hein and Kilikoglou respectively, some resolution can be expected in the near future.

The strange character of the Special Deposits

The looting of the Special Deposit North, which may have started in the 1950s, is responsible for some of the confusion which initially surrounded the condition of the finds there. The fragmented nature of the finds was, quite understandably, at first attributed to the recent disturbance caused by the looting. It was not initially appreciated that in general all the artefacts found had been deliberately broken prior to their deposition in the third millennium BC.

That situation has been transformed, however, by subsequent studies, and particularly by the systematic excavation of the Special Deposit South and of the settlement on Dhaskalio. The finds in the Special Deposit South, with the subsequent thraumatological studies, have emphasized the importance of the role of the inhabitants of the participating islands who together sent material for ritual deposition to Kavos. The participation of those islands is highlighted again by the realization that most or all of the pottery found in the settlement on Dhaskalio, and all of that at Kavos, was imported to Keros, although it may not have been directly imported, since some major trading islands may have acted as intermediaries. Despite the loss of information from the Special Deposit North, we can now begin to form a picture where that loss of information can be assessed; for the fragmentary nature of the material which came to form the Erlenmeyer Collection, as discussed in chapter 14 of Volume II, was not so very different from the material recovered during subsequent authorized excavations. The possibility that some large and potentially restorable Early Cycladic sculptures were lost in the looting process (as suggested in part 2 of *The Keros Hoard*: Sotirakopoulou 2005) is perhaps supported by the find in 1967 of the complete folded-arm sculpture in the Special Deposit North by Zaphiropoulou (2007a, 32; 2017). The numerous very large fragments which have been recovered both from the Special Deposit North (Sotirakopoulou *et al.* 2017) and from the Special Deposit South, as documented here in Chapters 2 and 3, support the testimony that large sculptures or sculptural fragments were unearthed and sold in the looting (Papamichelakis & Renfrew 2010). There need be no suggestion, therefore, that entire classes of material were lost to science in the looting process

without leaving any discoverable trace. Even the striking bird vessel in the Goulandris Museum of Cycladic Art (Doumas 1968, 173, fig. 329), allegedly from the Special Deposit North, has left its trace in the systematically excavated finds from that location in the form of recognizable marble fragments of birds.

So it is possible to take an overview now of the sanctuary on Keros without feeling that the episode of looting has removed entire categories of evidence from our knowledge. It is not necessary to include in our detailed discussions the unprovenanced material documented in *The Keros Hoard*, precisely because the authorized excavations have always given ample evidence to compare the looted Special Deposit North with the undisturbed Special Deposit South, and both of these with the settlement on Dhaskalio. But what a strange picture emerges!

As a major centre of congregation, the sanctuary at Kavos is unusual in lacking any monumental structures to impress the visitor. There is no circle of megalithic stones, as at Göbekli Tepe in eastern Turkey or at Stonehenge in England. The natural setting at Kavos is itself impressive, however: a natural amphitheatre, as discussed by Dixon in chapters 3 and 4 of Volume I. The fame of the sanctuary in the Cycladic Islands, and indeed beyond, must have been enhanced by the continuing deposition of choice materials there, themselves already the result of rituals of fragmentation in the participating islands of the confederacy, and brought by sea to Keros. On the other hand, at the settlement on Dhaskalio the buildings themselves must have been decidedly impressive. The view of Dhaskalio from the north, as one approached the sanctuary, must have imposed itself as a succession of vertical walls of white Naxian marble. The investigation of the walls at the north end of Dhaskalio, and their phasing, is one of the objectives of the renewed investigations on Dhaskalio initiated in 2016.

It is clear that the pilgrims visiting the sanctuary must have resided on Dhaskalio, perhaps for a few days. But the materials which they had brought for ritual deposit in the sanctuary at Kavos did indeed go to Kavos. Not a single fragment of a folded-arm sculpture has been found on Dhaskalio itself.

Many problems remain. It is not entirely clear where the large sculptures, up to a metre and more in height, which we have documented in fragmentary form in the Special Deposit South, were originally displayed. The great figure from Amorgos, fully 1.49 m in height (Zervos 1957, pls. 297, 299) came to the National Museum in Athens through the notorious dealer Ioannis Palaiologos (Galanakis 2013), and the early date of its acquisition leads us to accept it as authentic. Fragments of others, originally almost

as tall, have come from both the Special Deposits at Kavos. The evidence there leads us to infer that they were brought already broken to Keros. We have no direct evidence yet as to how these monumental figures were initially displayed on the other Cycladic islands prior to their ultimate breakage, or with what rituals they were involved. There is no evidence to suggest that such large figures were also used outside the Cycladic islands, and so the move to monumentality in sculpture was a feature particularly associated with the sanctuary at Kavos.

The central role of Keros in the use of these sculptures is documented by the wealth of the varieties and sub-varieties of the folded-arm sculptures found in the two Special Deposits. It seems likely that the Kapsala variety of the folded-arm figure had almost gone out of use before the rituals of deposition at Kavos began, otherwise more numerous fragmentary examples would have been found in the Special Deposits. But the other main varieties (except one) are all richly documented: the Spedos, Dokathismata, Chalandriani and Keros varieties, as documented in Chapters 2 and 3. Only the Koumasa variety is lacking. Produced and used exclusively in Crete, the latter may illustrate the wider influence of the belief system which was centred on Keros. This belief system is seen in the widespread use of marble folded-arm sculptures and marble vessels of standardized forms, seen widely in the Cyclades. That it was centred on Keros is implied by the repeated deposition of fragmented marble sculptures and vessels at Kavos over several centuries in circumstances which make it clear that they were brought from a number of the surrounding Cycladic islands. But it is clear that no pilgrims came from Crete to Keros to participate in the rituals of deposition, for no items of Cretan origin have been found on Keros.

One indication of the dominance of Keros in the rituals in which these sculptures were employed is perhaps documented by the find distribution of what we have re-named the Kavos sub-variety, preferring that nomenclature to Getz-Gentle's 'Goulandris sculptor' (see Chapter 1). Her systematic listing of all the known examples of this sub-variety, including those without provenance (Getz-Gentle 2001, 161–6), is important and helpful; for despite the 76 occurrences of this form which she is able to list, only seven meet the standards for inclusion in systematic consideration which we have set out (Renfrew 2017a) in order to guarantee authenticity. In this volume we have scrupulously avoided referring to finds deriving from unauthorized (and therefore illicit) excavations which appeared on the market after the year 1914. But if we relax that rule now, for a brief moment, to consider how works of the Kavos sub-variety ('Goulandris

sculptor') have become known, it is very notable that the great majority of examples are first documented as appearing in collections or on the market after the year 1950. Some of these may well derive from unauthorized excavations in the Cycladic cemeteries occurring around that date: there is no way of knowing. But there is the possibility that a large proportion of these pieces may in fact derive from the looting which took place prior to 1963 in the Special Deposit North. Only three examples are securely documented before 1914. Only one is known to come from an authorized excavation after that date (from Grave 23 at Aplomata on Naxos) prior to the documented finds from the Special Deposit North (Sotirakopoulou *et al.* 2017) and the Special Deposit South (Chapters 2 and 3 in this volume). Yet a further 72 examples in her list have become known in the years since 1950, including those from the Special Deposits. That is a prodigious number, and suggests (if the examples in her list are all authentic) that this form was one that was preferentially deposited in the Special Deposit North. This is indeed the position taken by Getz-Gentle (2008a) in her comments on *The Keros Hoard* (Sotirakopoulou 2005). We have deliberately not referred to these unprovenanced finds elsewhere in this present publication, since their authenticity cannot be assured. But this line of thought does enable a view to be taken of the possible importance of the sanctuary at Kavos and perhaps also of the scale of the looting which may have taken place. It should be emphasized that, while we have deliberately not brought these unprovenanced materials into consideration elsewhere in this publication, wishing to base our conclusions on authentic and documented material, the case of the Kavos sub-variety ('Goulandrisculptor') may nonetheless give an indication of the scale and importance of the sanctuary; for while extreme caution must be exercised in speculating about sculptures appearing on the market since 1950 which may have derived from the Special Deposit North (which is why we have not alluded to them elsewhere in this volume), the possibility that a large number of the Kavos sub-variety sculptures listed by Getz-Gentle did in fact come from the Special Deposit North during the looting episode suggests a further dimension to our understanding of the extent of the material deposited there, and the scale of material originally present in the sanctuary.

The social dimension

In seeking to understand Early Cycladic social organization, we would certainly wish to know more about how the settlement at Dhaskalio was organized. In chapter 34 of Volume I, the evidence was reviewed,

leading to the conclusion that there may have been a small permanent population of around 20 inhabitants, supplemented on periodic occasions by much larger numbers, perhaps of as many as 400. The recent Keros Island Survey (Volume VI) has suggested that Keros itself was more densely inhabited in the early bronze age than previously thought, and that its resources may have supported a population at Dhaskalio of more than 20. Yet the structure of the organization both at Dhaskalio and more widely is not yet clear. Here we have naturally focused upon the materials discovered at Dhaskalio and Kavos. Yet to assess the role of the sanctuary on Kavos in the wider Aegean world, it is necessary to focus also on other sites in the Cycladic islands and beyond. As with other centres of congregation, the visitors participating in the periodic assemblies, whether or not we choose to regard them as pilgrims, themselves formed a wider participating community, which we have referred to as the Confederacy of Keros (Renfrew 2013). It was presumably these interactions, a feature of the connectivity of Keros discussed above, which led to the development of shared features in the daily lives, in the *habitus* to use the term favoured by Bourdieu (1977, 15), of the participants in the Confederacy.

These shared features are most clearly seen in resemblances in style, resemblances which are preserved in the archaeological record in the material remains, the artefacts, which are preserved. For the case of the marble sculptures and vessels, these formal and stylistic similarities have been systematically, perhaps exhaustively, considered in earlier chapters of this volume. For the ceramic forms, they are systematically treated in Volume IV and in the forthcoming Volume V, as well as in Chapters 6 and 7 in this volume and earlier in the present chapter. Other materials are reviewed in Chapter 9. Together they constitute, in Phase A, the archaeological 'culture', that constantly recurring assemblage of artefacts, which was in use in the Cyclades at that time, namely what has been termed the Keros-Syros culture (Broodbank 2000, 54; Renfrew 1972, 170–85). This name explicitly refers to Kavos on Keros and to Syros, with its important settlement and cemetery at Chalandriani. We can suggest now that the sanctuary at Keros played an important role in the development and maintenance of the Keros-Syros culture. As we have seen, during Phase A at Dhaskalio and Kavos, the ritual activities at Kavos were the principal *raison d'être* for the settlement on Dhaskalio. Yet it is clear that the settlement continued to develop and flourish during Phases B and C, when the ceramic evidence in particular shows that the Special Deposits were less intensively visited. Perhaps at this later time it transformed itself into a

trading centre, of the kind envisaged by Broodbank (2000, 231–6). The metallurgical activities practised at Kavos Promontory should be recalled here (see Chapter 8). They used copper ores brought probably from the western Cyclades, which were accompanied also by activities of casting, and annealing on Dhaskalio.

Yet Dhaskalio does not seem to have developed into an administrative centre comparable with those of the mainland, like Lerna, with its House of Tiles and its abundant evidence of clay sealings. The settlement at Dhaskalio has not so far yielded significantly more evidence of the organization of recorded administration, commerce and trade by the use of seals and sealings than the very modest and rather remote Cycladic settlement at Markiani on Amorgos (Angelopoulou 2006), or the larger and more important site of Skarkos on Ios (Marthari 1997). The areas assigned to Phase A so far excavated on Dhaskalio are comparable to those of Phase III excavated at Markiani, and seals and sealings in those levels are notably lacking. Seals and sealings are scarce at Skarkos, so that these Cycladic examples differ markedly from the situation at Early Helladic II Lerna.

The final decline

The Special Deposits at Kavos were already in decline during Phase B at Dhaskalio, and were very little used at all in Phase C. That is already clear from the available ceramic studies (see Chapter 6) and will be further documented in Volume V. It is clear, too, from the finds of sculpture. The finds of the Keros variety of the folded-arm sculpture seem to document the dying days of that iconic form. It is interesting to see how the sometimes rather inelegant yet still perfectly canonical forms of the Chalandriani variety were accompanied by the frankly much less competent efforts documented by the Keros variety.

The radiocarbon chronology established in chapter 33 of Volume I should perhaps be revisited at this point. There (Volume I, 702) the date of the end of Phase C was set c. 2300 bc on the basis of the calibrated radiocarbon determinations, with a possible end of 2240 bc regarded as the latest feasible date. It was recognized that these dates are naturally dependent on the samples from which they were determined, and that it was observed that the contexts of those samples may not have been as late as the contexts of the most recent pottery recovered. At the same time it was noted that the radiocarbon dates obtained for the end of Phase C (where some ceramic features are seen inclining already towards the Middle Bronze Age as seen at Phylakopi in Melos or Akrotiri on Thera) were some two centuries earlier than had earlier been

estimated for the EBA/MBA transition (Renfrew 1972, 221) or as predicted from the radiocarbon determinations at Kolonna on Aegina (Wild *et al.* 2010). More recent discussion of Bayesian chronological modelling (Manning 2015, 141) suggests that it may be appropriate to lower the date for the end of the Cycladic early bronze age (and the end of Dhaskalio Phase C) to 2200 bc, rather than the 2300 bc previously proposed.

Here it would be wise to take note of recent work on the Marine Reservoir Effect and its significant impact upon radiocarbon chronologies (Wiener 2009; Wiener & Earle 2014). It has been much discussed in the context of the catastrophic eruption of the volcano on Thera, several centuries after the demise of Dhaskalio. But the working of the effect is not dependent upon that eruption and might well have operated locally during the later third millennium bc so as to make radiocarbon determinations come out older than the true calendrical dates (see Wiener 2014).

Certainly there seems to have been a decline in settlement density in the Cyclades towards the end of the Cycladic early bronze age (Broodbank 2000, 327; Renfrew 1972, 233; Wagstaff & Cherry 1982), and both the recent Keros Island Survey and the Southeast Naxos Survey have yielded fewer indications of settlement in the middle bronze age than in the later early bronze age. The important site of Spedos in southeast Naxos lacks evidence of middle bronze age occupation. And while just a few Early Cycladic cemeteries in south Naxos did continue in use for a while, notably Aila (Papathanasopoulos 1962, 131, pl. 63), there is no sign on Dhaskalio (or in the Special Deposits at Kavos) of the middle bronze age forms seen at that site.

Climatic factors may be one of the underlying causes of decline at this time, as discussed by Wiener (2014), but another, just as significant, may be a change in seafaring. The sail seems to have made its first appearance in the Aegean at just this time (Broodbank 2000, 341; 2013; Renfrew 1972, 357), as documented by depictions on pottery and on sealstones. This was an innovation of great importance. Previously the grandest sea craft in the Cyclades had been the Cycladic longships, as clearly depicted on the incised 'frying pans' from Chalandriani on Syros (Tsountas 1899, 90, fig. 22). They were no doubt often accompanied by more modest vessels which did not require so large a crew. But the development of the sail for marine transport clearly had a decisive impact. This impact is seen at once by much stronger Minoan influence in the Aegean, visible at the town sites of Phylakopi in Melos and Akrotiri on Thera. At this time there was a shift towards urban centres, often only one major settlement on an island (as on Melos). Smaller localities (of which the island of Dhespotikon near Antiparos

is an example) became deserted. Different networks of connectivity developed in the second millennium BC (Knappett *et al.* 2008).

The influence of Keros: the archaeology of ritual

The sanctuary on Keros was a product of its time. It began at just the moment that the international spirit of the early bronze age was abroad (Broodbank 2000, 211; Renfrew 1972, 451). That was in the Early Bronze II period, the time in the Aegean of the Keros-Syros culture, the Korakou culture (Early Helladic II), the *floruit* of early Troy (Troy II) and the major development of Early Minoan Crete (Early Minoan II). This was the time that metallurgy, first copper and then bronze, took off in a big way (and its earlier antecedents are becoming increasingly well understood). It is symbolized by the development of the dagger as a widely used weapon or item of display (although none has been found on Keros), and indeed by the widespread distribution of the sauceboat form. Examples of the sauceboat are known in gold (Renfrew 1972, pl. 19.3), and it seems likely that the form was first developed in beaten gold, the ceramic product being a subsequent skeuomorph of the golden prototype.

The much greater mobility of the Cycladic seafarers at this time, and their mainland contemporaries, must have made visits to Keros much easier and much quicker. Of course the exploitation of Melian obsidian in the Upper Palaeolithic period, even before the coming of farming, documents that marine skills were established in the Aegean at a very early time. It may have been the development of Mediterranean polyculture (the vine and the olive as well as the long-established cereals) which facilitated the early bronze age economic expansion.

This was the era of the sanctuary on Keros. We have as yet no evidence documenting a central place in the Cycladic Islands before this time. The Cycladic islanders certainly practised rituals of burial from the Mesolithic period, as finds on the island of Kythnos demonstrate (Sampson *et al.* 2002), and small marble sculptures of female seated figures, the so-called ‘fat ladies’ (Evans & Renfrew 1966) are found from the later Neolithic period. These may be part of a movement towards depiction of humans in baked clay as well as stone which is widely seen in Anatolia and southeast Europe from the early farming period. In the Cyclades, marble was preferred from later Neolithic times, and at the beginning of the early bronze age, in the time of the Grotta-Pelos culture, schematic figures are widely seen (Renfrew 1969). Indeed, towards the end of this phase, small marble sculptures of the Plastiras type are widely found, accompanied by

ritual vessels of marble, the kandila and the marble beaker. So far as we know, these were forms associated mainly with burial rituals. And they are forms which had gone out of use before the rituals of deposition on Keros were initiated.

Interestingly, these rituals at Keros seem to have accompanied, or perhaps followed, the emergence of the canonical folded-arm sculpture which became such a widespread symbol or icon of the Confederacy of Keros. The earliest variant of the folded-arm figure, the Kapsala variety, is not abundantly documented in the Special Deposits. But it is quite widely seen in the Cycladic cemeteries of the Keros-Syros culture, not only at the type site of Kapsala on Amorgos, but most notably at Aplomata on Naxos (Doumas & Lambrinoudakis 2017).

Something must have happened to bring together these symbolic elements which were already seen in the first Cycladic cemeteries of the Keros-Syros culture—the marble folded-arm sculptures of Kapsala variety, the marble rolled-rim bowls and soon the ceramic sauceboats—as an expression of appropriate piety, such that it became appropriate to bring them to Keros, already fragmented, and to deposit them in a structured and formal way in the Special Deposits at Kavos. By this time the Kapsala variety of the folded-arm figure had evolved into the Spedos variety, and some very large sculptures were produced. A number of other ceramic forms were involved, notably the conical-necked jar and (less often) the multiple-headed lamp.

Quite what suddenly made Keros, until that time only very sparsely inhabited (although visited by late Neolithic hunters with their bows and pressure-flaked obsidian arrowheads) so suitable for the installation of the Special Deposits at Kavos and the settlement at Dhaskalio is not clear. One factor may have been its rugged terrain, and its at that time thinly inhabited status. Ano Kouphonisi nearby was already prosperous. There is no indication that the sanctuary was instituted by a pre-existing settlement in south Naxos or Amorgos. But it is clear that the rituals of deposition at Kavos, once instituted, were maintained and must have grown in fame as participants from most of the Cycladic islands, and then apparently also from mainland Greece, came to participate. The iconography of the folded-arm figure, which as we have seen had earlier Cycladic origins, became extremely well established. The folded-arm type evolved from the Spedos to the Dokathismata and Chalandriani varieties, and was imitated in Crete by the Koumasa variety. But in later times during Dhaskalio Phases B and C, it seems to have been superseded by the less accomplished Keros variety and by the very simple schematic figurines of the Apeiranthos variety.

The decline in the use of the Special Deposits on Kavos after the initial centuries of the Keros-Syros culture (Dhaskalio Phase A) is clear. The sanctuary went into decline, and as noted above the settlement on Dhaskalio may have functioned for a while more as a trading centre than as the domestic and residential counterpart for the Special Deposits which were at the heart of the sanctuary. As we have seen, there was probably a recession at this time, at the end of Phase C, perhaps the result of climate change (Wiener 2014), and the introduction of sailing ships definitively changed the networks of interaction operating in the Aegean. The powerful attraction which Keros had exercised, symbolized above all by the iconic folded-arm sculpture, went into permanent decline. Some Cycladic towns, notably Akrotiri on Thera and Phylakopi on Melos, continued as important trading centres into the middle bronze age and beyond, but the coherently Cycladic character of their culture had vanished. They

were subject to strong Minoan and then Mycenaean influences, seen not only in their pottery but also in their cult practices (Renfrew 1985). The Confederacy of Keros was at an end. Dhaskalio and Kavos were abandoned. It is clear that in its heyday Keros functioned primarily as a symbolic centre, like the world's other early ritual centres. Indeed, it seems to have been the earliest maritime centre of congregation.

In conclusion, it may be asserted that the finds on Keros establish Kavos as the earliest maritime sanctuary on earth (Renfrew *et al.* 2012), a centre of congregation comparable with other early symbolic centres across the world before the development of fully fledged state religions. The Confederacy of Keros (Renfrew 2013), as this complex network of interacting Cycladic island settlements may be termed, which is defined through the ritual practices focused upon the sanctuary, must have been an influential entity in the Aegean region of the third millennium BC.