An Island Archaeology of the Early Cyclades

CYPRIAN BROODBANK



PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 2RU, UK www.cup.cam.ac.uk 40 West 20th Street, New York, NY 10011-4211, USA www.cup.org 10 Stamford Road, Oakleigh, Melbourne 3166, Australia Ruiz de Alarcón 13, 28014 Madrid, Spain

© Cambridge University Press 2000

This book is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2000

Printed in the United Kingdom at the University Press, Cambridge

Typeface Monotype Plantin Light 10/14pt. System QuarkXPress™ [SE]

A catalogue record for this book is available from the British Library

Library of Congress Cataloguing in Publication data

Broodbank, Cyprian.

An island archaeology of the early Cyclades / Cyprian Broodbank.

p. cm

Includes bibliographical references and index.

ISBN 0 521 78272 4

1. Cyclades (Greece)—Antiquities. 2. Greece—Antiquities. 3. Cyclades (Greece)—Civilization. 4. Island people—Greece—Cyclades. 5. Bronze Age—Greece—Cyclades. I. Title.

DF221.C93 B76 2000

939'.15-dc21 00-024174

ISBN 0 521 78272 4 hardback

CONTENTS

	List of figures	page x
	List of tables	xiv
	Acknowledgements	XV
	List of abbreviations and dating conventions	xviii
	Prologue: islands of 'prehistory'	1
1	Whither island archaeology?	6
2	Cycladic approaches	36
3	Islands, people and seafaring	68
4	The dawn treaders	107
5	Cultures of colonisation	144
6	Small worlds	175
7	Which islands in the stream?	211
8	Paint, paddles and the politics of value	247
9	Ulysses without sails	276
10	An altered archipelago	320
11	The emergence of Minoan dominance	350
12	Cycladic archaeology as island archaeology	362
	References	368
	Index	402

FIGURES

	The Cyclades	Frontispiece
	The Aegean	Frontispiece
1	Chronology, terminology and major synchronisms	xix
2	Ways of visualising islands and islandscapes	24
3	The Mediterranean, south-west Oceania and the Caribbean	39
4	Maximum seaward visibility from land in the Mediterranean	40
5	The Cyclades and select other island clusters	42
6	Recent work on early Cycladic sites and landscapes	49
7	An exploration index for the early Cyclades	52
8	The price of esteem: Daskaleio-Kavos looted	59
9	The descent of Cycladica	61
10	A critique of proportionality in Cycladic figurines	62
11	Painted decoration on Cycladic marble figurines	63
12	The Cyclades as a kyklos around Delos	69
13	Six Cycladic islandscapes	72
14	Island size in the Cyclades	73
15	Inter-island distance in the Cyclades	75
16	Three-dimensional computer-generated view of the south-east Cyclades	76
17	Rainfall and hydrology in the Cyclades and rainfall in surrounding areas	77
18	Inter-annual fluctuation of rainfall on Melos	79
19	Cycladic geology and mineral resources	80
20	The composition of faunal assemblages at early Cycladic sites	82
21	Currents and winds in the Cyclades	93
22	Agricultural tasks and the sailing season in the Aegean	95
23	Early Bronze Age Cycladic boat depictions	98
24	Daily travel range in the early Cyclades	103
25	An experimental reed-boat and its Cycladic voyage	104
26	Model phases for the settlement of an island	109
27	The sinking of Cycladia	112
28	Part of Sta Nychia obsidian quarry on Melos	114
29	Mesolithic sites in the Aegean	115
30	Aegean islands colonised in the Neolithic and Early Bronze Age	118
31	Saliagos and its environs	119

List of figures xi

32	Kephala and its environs	119
33	Neolithic Cycladic flaked-stone points	121
34	Neolithic sites in the Cyclades	122
35	North-east Melos showing the location of Neolithic sites	124
36	Axes of entry into the Cyclades for short-range colonising groups	132
37	The high island chain: Samos, Ikaria and Naxos	134
38	Expansion model for colonisation of the Cyclades from Attica and Euboia	135
39	Target/distance analysis for colonisation of the Cyclades from the	
	south-east Aegean	136
40	Expansion model for colonisation of the Cyclades from the south-east Aegean	138
41	Microlocations of Saliagos culture sites	147
42	Kephala cemetery	150
43	Distribution of Grotta-Pelos culture and other contemporary sites	151
44	A typical Grotta-Pelos cemetery: Lakkoudes on Naxos	152
45	Final Neolithic copper flat axe from the Zas cave	160
46	Distribution of select later Neolithic prestige objects found in the Cyclades	161
47	Distribution of Neolithic light-on-dark pottery in the southern Aegean	162
48	Mt Zas	165
49	Elements of the proposed Grotta-Pelos exchange culture	168
50	Distribution of Grotta-Pelos culture marble vessels	169
51	The diversity of anthropomorphic figurines from the early Cyclades	172
52	Terrell's proximal point analysis for the Solomon islands	182
53	Proximal point analysis for the Cyclades	184
54	Naxian worldlets	188
55	Changing maritime orientation in the Cyclades	189
56	Remote and parochial zones in the Cyclades	192
57	Islands with Grotta-Pelos culture sites compared with the PPA 1 network	199
58	Corbelled graves at Chalandriani cemetery on Syros	200
59	Corbelled grave distribution compared with PPA 4 network	201
60	Painted, incised and stamped-and-incised pottery of the Early Bronze II	
	Cyclades	203
61	Pedestal-based jar variants and their distributions	204
62	The creation of a south-east Cycladic islandscape: interaction and material	
	culture	208
63	Chalandriani-Kastri	213
64	Hedgehog figurine from Chalandriani cemetery	216
65	Agia Irini	217
66	Grotta-Aplomata	219
67	Daskaleio-Kavos and Kavos North	224
68	Part of the so-called 'Keros hoard'	226
69	Marble vessels from sanctioned archaeological work at Daskaleio-Kavos	227

List of figures xii

70	Kavos North	231
71	Quantitative fabric analysis of the surface material from Daskaleio-Kavos	233
72	Pottery import levels at selected Cycladic Early Bronze II sites	234
73	Provenance of imports at Daskaleio-Kavos	235
74	Painted pottery from Daskaleio-Kavos	236
75	Nodes of intense communication in the Cyclades	239
76	Islandscape seen from Daskaleio-Kavos	242
77	Syros: settlement pattern and the islandscape seen from Chalandriani-Kastri	243
78	Similar figurine heads with different decoration	248
79	Equipment for body decoration and modification from burial contexts	250
80	Greenstone symbolic crucible from Amorgos	251
81	Symbols of maritime travel, navigation and swiftness	252
82	Marble harpist figurine said to come from Keros	254
83	The ideology of fighting: a hunter-warrior figurine and a 'silvered' dagger	255
84	Areas favourable to the organisation of longboat activity in the Cyclades	257
85	One-day travel ranges from major Early Bronze II island centres	261
86	Number of grave goods per grave in the Agioi Anargyroi cemetery	264
87	Early Bronze II Cycladic distributions of marble figurines and painted	
	pottery	266
88	Skeuomorphism seen in clay jugs	271
89	Two island trading systems compared: the Cycladic and Siassi networks	274
90	Major sites of the Early Bronze II Aegean	280
91	Distribution of obsidian finds in the southern Argolid	281
92	Selection of large Early Bronze II Aegean settlements	282
93	The Early Bronze II Aegean as a margin of the Near Eastern world system	284
94	Major maritime routes of the Early Bronze Age Aegean	289
95	Two Cycladic metal-processing landscapes: Agios Sostis and Skouries	295
96	Distribution of talc ware	296
97	Chrysokamino and its environs	299
98	The main sites involved in long-range Kampos group trade	300
99	Kampos group bottle	301
100	Distribution of select inter-regional trade objects of earlier Early Bronze II	305
101	Cycladic imports at Knossos, Crete, in Early Bronze II	307
102	Principal Kastri group shapes	310
103	Distribution of Kastri group pottery in the Aegean	312
104	Distribution of fortified sites in the Cyclades	314
105	Fortified settlements: Kastri, Mt Kynthos and Panermos	315
106	Changing patterns of Early Bronze Age Cycladic long-range interaction	319
107	Phylakopi I culture rock-cut tombs at Phylakopi	323
108	Duck vase found on Amorgos	324
109	Distribution of later Middle Bronze Age Cycladic sites	327

110	Two major Middle Bronze Age Cycladic settlements: Phylakopi and	
	Mikri Vigla	329
111	Distribution of Phylakopi I culture sites	330
112	Phylakopi I	331
113	The Early Bronze III 'gap'	332
114	Proximal Point Analysis 5	339
115	Design on a Minoan seal illustrating a sailing ship	342
116	Images of the new shipping in the Cyclades found at Phylakopi	344
117	Model for the transformation of settlement in the south-east Cyclades	348
118	Phylakopi I culture pyxis from the Agios Loukas cemetery	349
119	Distribution of duck vases in the Aegean	352
120	Three major Aegean interaction zones at the start of the Middle Bronze Age	355
121	Dendritic pattern of maritime trade centred on palatial Crete	357
122	Middle Minoan imports from palatial Crete found at Phylakopi	358

TABLES

1	Island demography in the early Cyclades	page 90
2	Iconographic features of longboats and other canoes	98
3	Performance parameters and functions of longboats and other canoes	102
4	Ranked size/distance scores for Cycladic islands	130
5	Large Cycladic cemeteries and their burying populations	178
6	Percentage of points with different degrees of seafaring orientation in	
	each PPA	190
7	Relative popularity of painted, incised and stamped-and-incised decoration	202
8	Pottery shapes with painted decoration at four investigated Cycladic sites	205
9	Painted motifs at the investigated Cycladic sites	206
10	Two rich south-east Cycladic burials of Early Bronze II date	265
11	Phylakopi: nomenclature, diagnostics, culture attributions and dates	322
12	Comparative boat performance for canoes and sailing ships	345

Whither island archaeology?

There are no more deserts, there are no more islands. Yet the need for them makes itself felt.

Minotaur, or The Halt at Oran, ALBERT CAMUS

Camus' islands and deserts are metaphors for solitude, but his words are likely to strike chords with many people who study island societies. Islands still exist, of course, as do islanders who trace their descent from settlers in the remote or recent past. But with the modern world's expansion in the last few centuries across the deserts of the sea, island societies as once-distinctive ways of living have become increasingly rare. Some islands have profited as the stepping-stones in continent-based maritime networks of commerce and power, as did those Mediterranean islands in the sixteenth century AD aptly described by Braudel (1949: 136) as 'la flotte immobile de Venise'. For the vast majority of islands, however, modernity has brought chronic social, economic and ecological exploitation and disintegration, plus an off-loading of continental escapism and violence best captured by the name 'Bikini'. It is only a superficial paradox that as islands the world over have been transformed, often past recognition, their role in Western culture as settings for political utopias, nostalgic idylls and savage fantasies has been affirmed in literature and art. But the demise of countless island societies in recent times and the persuasive, if often contradictory, cultural metaphors that surround them, make it now hard to conceive what living on islands might once have been like. This chapter examines island archaeology as a means, and (as will be seen) often the only sustainable means, for shedding light on the islanders of the pre-modern world.

Island archaeology emerged as a defined field during the 1970s, its birth being often dated to a well-known article by Evans on 'Islands as laboratories for the study of culture process' (1973). Since then, it has generated an impressive range of ideas and analytical techniques, often inspired by island biogeography and island anthropology, that are theoretically applicable to islands anywhere. Books like Kirch's *The Evolution of the Polynesian Chiefdoms* (1984), Terrell's *Prehistory in the Pacific Islands* (1986), Irwin's *The Prehistoric Exploration and Colonisation of the Pacific* (1992), Keegan's *The People Who Discovered Columbus* (1992) and Spriggs' *The Island Melanesians* (1997), plus countless monographs and articles, are testimony to island archaeology's achievements – as well as to its relative dominance by Pacific scholarship of a high calibre. This spate of research has established that although islands were among the last parts

of the globe to be settled, island life has nonetheless been an essential feature of our species' history for at least the last 40,000 years (Gamble 1993: 214–40). But as the field expands, and despite demonstration of an encouraging capacity for paradigm shifts within specific island theatres (Terrell *et al.* 1997), there is a serious danger that island archaeologists will cease to remind themselves of some crucial basic questions. What is island archaeology? Why is it done and why does it matter? And is it being done in the most appropriate, productive and innovative ways?

As the first theorists were quick to point out, one of the most striking features of islands is their diversity (e.g. Evans 1973: 517; Terrell 1977a: 62), and this demands a good measure of plurality in interpretative approaches too. But a more critical glance suggests that whilst much of the wild-growth of ideas has been fruitful, some may be a more mixed blessing. If island archaeology is to become as rigorous, challenging and creative as it should be, there is arguably a need to think harder about when and why specific approaches are properly applicable. It has to be recognised, too, that ultimately many of the basic 'hows' and 'whys' of the subject are inextricably linked to still underresolved questions concerning the nature of insularity, and whether islands should be considered good analogies for the rest of the world, or distinct places without sustained parallels elsewhere. On a rather different note, island archaeology would also do well to ponder the implications of wider sea-changes in archaeology since the 1980s, notably in approaches to landscapes and material culture. Current island archaeology therefore stands at a crossroads. Given this fact, it is best to begin an exploration of the field by standing some distance back, and asking simply what we think we know about the past of islands, in the most general sense, and how we claim knowledge of it.

Islands and history

The abundance of island history

Modern nostalgia and dreams of a virgin paradise foster two common mistakes about pre-modern islands and islanders, delusions that can be termed 'edenic equilibrium' and 'pristine seclusion'. Sharp observers have long been aware that neither will bear close comparison with what is actually known of island life, but both reward a glance at this stage, not only to establish what island archaeology is not about, but also because they may easily creep back into our thinking via the back door of unguarded assumptions. Examination of their deficiencies, moreover, can help to establish some important initial points about history on islands, and its articulation with the histories of continents.

Taking edenic equilibrium first, a realisation of the extent of islands' undoing in recent times should not lead to the presumption that earlier islanders necessarily lived in a perfect balance with their environment. Island environments and ecologies undergo a constant flux even without human intervention (Whittaker 1998: 27–31),

and indeed the concept of species turnover is central to the science of island biogeography (MacArthur and Wilson 1967). The arrival of people invariably quickened the tempo. Contemporary with the early human occupation levels on many islands is evidence for anthropogenic alteration of the ecology and environment of land, coast and sea, with a consequent rise in disequilibrium (Amorosi *et al.* 1997; Burney 1997; Flannery 1994; Kirch and Hunt 1997; Kirch and Ellison 1994; Rackham and Moody 1996; Steadman 1995; Whittaker 1998: 228–56). Grove (1995) argues that the more perceptive early European visitors to small islands such as Mauritius and St Helena, where the damage became most rapidly visible, were well aware of the degradation caused by their compatriots' island-altering activities, and it would surely be perversely chauvinistic to deny such an awareness to the anonymous people who long before had manipulated the biota on innumerable islands from Mangaia to the Balearics. It is likely, in other words, that islanders have always been conscious of their role as world-makers in terms of the transformation of their environments.

Equally against the existence of an edenic equilibrium is the clear evidence that island societies have enjoyed dynamic histories. Even before the beginnings of island archaeology, ample hints already existed. Classical Greek historians such as Herodotos described an Aegean sea that was alive with busy, volatile island societies. When Cook entered the Pacific, he quickly realised from the spread of Polynesian dialects over vast areas, and the residual knowledge of sailing directions for distant islands along routes no longer used, that people had once voyaged in different ways from those observed in the period of contact. As will shortly become apparent, testimonies from this period and its aftermath are problematic in several ways, but overall there is little doubt that even within this narrow time-slice, the Pacific was no Gauguinesque dream-world, but a hive of people engaged in history-making. The vying chiefdoms of Hawaii, the drama of crescendo and collapse on Easter Island, the rise of political and ceremonial centres at Pohnpei and Lelu in Micronesia, and the violent encounters between Melanesian communities and intrusive Polynesian groups are simply a handful of examples. As this time-slice in the Pacific was a quite random sample from the islanders' viewpoint, there is every reason to presume that this plenitude of history was entirely typical of the preceding millennia, however much the individual structures may have altered. In the last two to three decades of the twentieth century, overwhelming archaeological confirmation of the truth of this extrapolation has emerged, as will be seen later in this chapter.

The delusion of pristine seclusion can apply to contact between islands, but has a wider significance in relation to contact between islands and the world beyond them. The last great island encounters, in the Caribbean and Pacific, were head-on collisions between peoples separated by cosmological and technological chasms (Greenblatt 1991; Meleisea and Schoeffel 1997; Sahlins 1985, the last criticised in Obeyesekere 1992, with a rejoinder in Sahlins 1995). The casualty figures, e.g. most of the indigenous population of the Caribbean annihilated within a generation or so of Columbus'

landfall (Mova Pons 1992), make it easy to excuse a conceptual tendency to polarise islands' options between extremes of seclusion and integration, purity or death. But in fact such polarisation can be seriously misleading. Even in the Pacific and Caribbean theatres, the picture is more nuanced and complex than it initially appears to be. There is evidence for earlier, non-disastrous and (at least for some islanders) plausibly advantageous links with people and places on the surrounding continental rims, contacts that extended well beyond the obvious fact that the first islanders came from somewhere else. Contacts between the Caribbean islands and the American mainland are likely (Alegría 1983: 154-5; Watters 1997). In the Pacific, links are attested between Island South-East Asia and south-west Oceania (Ambrose 1988; Bellwood and Koon 1989), between the Aleutians, Alaska and possibly north-east Asia (Corbett et al. 1997), as well as between eastern Polynesia and South America, the latter indicated by the dispersal of the sweet potato (Hather and Kirch 1991) and supported by computer simulations that demonstrate the probability of Polynesian landfalls on the coast of the Americas (Irwin 1992: 99-100; contra Heyerdahl 1952). At this juncture, it is worth emphasising that Sahlins' dissection of the meeting between the Hawaiians and Cook (Sahlins 1985), which contrasts world-views structured by utterly different, mutually incomprehensible principles, is essentially a classic essay in extreme cross-cultural encounter per se (cf. Fagan 1998), and probably does not describe a scenario at all typical of many islander-mainlander meetings in the past. Interestingly, in this respect, Spriggs (1997: 187-222) suggests that in eastern Melanesia, a less sequestered part of the Pacific at the period of European contact, the indigenous peoples' reactions to the first of the Europeans were preconditioned by prior clashes with the crews of Polynesian canoes.

Moreover, it is important to remember that in other island theatres, such as the Indian Ocean, north Atlantic and Mediterranean, where integration between islanders and mainlanders began in general much earlier, more tentatively and with less extreme technological distinctions distinguishing the participants, there was probably never any one horizon of encounter that represented as vertiginous a jump as those experienced in the Pacific or Caribbean during the first phases of contact with Western navigators. In the Mediterranean, in particular, sustained, often multi-directional extra-insular contacts seem, with very few exceptions, to have been a feature of island life from the start, and although we can detect signs of severe shocks to island systems during phases of rapid increase in their integration with the wider world (as will be seen in chapters 10 and 11), the options in terms of contact or seclusion can seldom have been starkly phrased.

What kinds of history?

In general, therefore, island and mainland histories are interlinked, if at some times intimately and at others quite distantly. How we go about exploring this dynamic is

crucial, as one group of Pacific archaeologists have indeed recently recognised: 'giving up the notion that islands are isolated worlds may achieve little if we are unsuccessful at finding out how people, places and events "on the outside" have influenced - sometimes decisively, sometimes not - what people "on the inside" thought, did, and accomplished' (Terrell et al. 1997: 175). We can, perhaps, conceptualise the external contacts of islands in terms of a sliding scale, with the two terminals representing (a) complete independence and (b) complete integration with the outside world (the latter terminal being that around which most islands currently cluster). Islands at any given point on the scale might move in either direction, of their people's volition or under compulsion, although the aggregate trend through time has certainly been towards integration. Movement along this scale need not be smooth or gradual, and there is nothing to prevent an island from remaining in the same place on the scale for a long time, and subsequently moving rapidly in either direction. Nor is there any reason why the constituent communities on an island, or even individual islanders, need all occupy the same point on the scale at any given time (a matter to which we shall return later in this chapter). It is difficult to say whether this freedom of manoeuvre is now largely a thing of the past, in other words whether islands and islanders are ever likely to break free to a significant degree from their present status as closely integrated adjuncts and satellites of continental systems.

The relationship between islands and the outside world is equally relevant to the intriguing question as to whether island histories are qualitatively different from those of mainlands, not in the internalised sense that all cultures, insular and non-insular, tend to see history through their peculiar prisms, but rather in terms of the manner in which we do best to conceptualise and analyse them. In particular, it may indicate a way forward in a current debate between those who advocate the exploration of island history mainly in linear, narrative, often phylogenetic, terms (Bellwood 1987; Kirch 1984; Kirch and Green 1987), and those who prefer 'reticulate', i.e. net-like, approaches that emphasise history as something that works through a mesh of local, dense, often recursive links, rather than as an onward march (Dewar 1995; Terrell 1988; Terrell et al. 1997). Though reticulate forms of explanation are far from unique to islands (Bellwood 1996), it is striking that several of their strongest advocates are island scholars. Terrell (1988), for instance, argues that the Pacific's past matches Darwin's metaphor of a 'tangled bank' better than the more familiar evolutionary model of a branching tree. In contrast to the pursuit of origins down the dimension of time, he recommends that we move between paths and across time, generating a multiplicity of histories in the place of a grand narrative and aiming 'to discover what creates, maintains or changes similarities and differences among people' (Terrell 1988: 645). Dewar (1995) develops similar ideas in the context of Madagascar. Such reticulate models are indeed attractive and apposite in many island contexts, given that islands are scattered, diverse places where overarching order is relatively rare, where hierarchies are as liable to be flat as vertical, where histories are prone to diverge, converge and blur with bewildering frequency, and where any single narrative, or equally an evolutionary model of division and differentiation, is bound to gloss over and flatten the detailed dynamics and variability of island culture.

Yet despite their attractions, there is little to be gained, and something to be lost, by insisting upon exclusively reticulate models in the writing of island history. This is not simply because certain islands at certain times have witnessed discrete episodes of rapid rise in social complexity and hierarchy that invite sequential analysis, for example Minoan 'state formation' (Cherry 1984a) or the establishment of chiefdoms in Polynesia (Kirch 1984), in the latter case regardless as to whether phylogenetic processes were in fact involved. The need to supplement reticulate models is also felt as soon as it is remembered that most island societies were in contact with mainland regions whose history can be informatively (if far from exclusively) analysed in terms of large-scale, long-term trajectories, sometimes of a world-systemic nature, with which island history has to be articulated. Island archaeology will require reticulate and linear approaches if it is both to remain sensitive to the peculiar dynamics of island lives, and at the same time provide convincing accounts of how these dynamics were meshed with other patterns, often quite different in nature and scale, beyond the insular sphere.

This vision of islands as places rich in history raises one final point. Among the bad jokes that mainlands have played on islands, one of the worst yet most recent is the reference to much of their past as 'prehistory'. It will be clear by now that their expanse of 'prehistory' lies 'before history' only if we privilege the written word (Wolf 1982). Given that the advent of literate navigators as harbingers of world history has marked a change, and in many circumstances a catastrophic one, for the people at the receiving end, the arrival of what we call history must frequently have spelt an end to indigenous history for the islanders involved. Beckett's portrait of colonialism in the Torres Strait islands (1988), or the 'humanitarian' prohibition on the Siassi traders' risky traditional long-range voyages (Keegan and Diamond 1987: 66-7) are but two salient examples of a common theme. To relegate contemporary islanders to a twilit 'posthistory' would be a mistake, given the qualified optimism that has recently started to be expressed about the future for at least the Pacific islanders (Hau'ofa 1993; Nero 1997; Spriggs 1997: 286-91; Terrell 1998). It would, moreover, fly in the face of the fact that many islands have experienced long and eventful cycles of history since their incorporation in the wider world, notably those, such as the Mediterranean and north Atlantic islands, that were drawn in earliest, while for those islands that remained empty until the age of global navigation (e.g. the Atlantic outposts and some Indian Ocean islands), the advent of history itself correlates with the spring tide of world history. But for people studying the lives of islanders in the deep past, or even on the threshold of the present in regions where world history arrived late, the term 'prehistory' is best avoided, save as a conscious irony. Plenty of island history has certainly existed. The question now is how to access it.

Island archaeology as island history

How can pre-modern island history be explored? The answer put forward here is that for most islands during most of their past, island archaeology is in effect the only viable means of doing so. To sustain this claim, however, it is necessary to examine several other possibilities, primarily oral histories, ancient written sources and, more recently, navigators' or ethnographers' reports.

Pre-modern oral and written sources

It is salutary to acknowledge how rarely it is possible to gain access to an island history of any time-depth through the islanders' own words. Oral history is notoriously liable to reworking, and indigenous islanders' historical accounts have proved very hard to integrate with Western analytical traditions (Linnekin 1997: 14–20). Even Garanger's excavation of the purported graves of Roy Mata, his retinue and other long-dead culture heroes of Vanuatu (Garanger 1972) does not so much prove the truth of local oral history as demonstrate that it grows out of, and weaves together, past events in ways that can curate some startlingly accurate details over long periods of time; how much is accurate, and how much tactically reworked by generations of telling, is still uncertain. Equally, few island societies used writing until relatively late in their history. Very few cases of indigenous island scripts are known from around the world, and most, if not all, developed during periods of increasing integration with continental societies - for instance 'Hieroglyphic' and Linear A on Crete in the second millennium BC (Olivier 1986), the latter spreading to adjacent islands, contemporary Cypro-Minoan on Cyprus (Merrillees 1995), and the Irish Ogham script (Edwards 1990: 103-4); Easter Island's rongorongo is a possible exception (Fischer 1997). Exogenous writing systems spread into the west Mediterranean islands only with Greek and Phoenician expansion in the first millennium BC, and into the islands off Eurasia's Atlantic fringe during the Roman empire. Further zones of island literacy developed in Ceylon and Island South-East Asia in the first five centuries before and after Christ. Thus written evidence is strikingly circumscribed, temporally and spatially, in contrast to the literary silence lying over the deeper past of islands, and over the Caribbean and most of the Pacific until the arrival of the Western navigators.

The same limitations attend ancient written testimony from external, non-island sources. The earliest examples come from the Mediterranean and Near East. There are several references to islands in Egyptian and Near Eastern texts of the second millennium BC (Cline 1994: 109–28; Knapp 1996), but these are restricted to a few very terse texts referring to Cyprus, the Aegean and Bahrain, mostly dealing with trade, diplomacy or warfare, plus some propagandistic and ritual texts designed for home consumption. In the first millennium BC the sources improve, producing narrative

history and, by the end of the millennium, *periplous* texts describing in detail the routes, sea-marks and ports of the Mediterranean and Indian Ocean (e.g. Casson 1989). East Asian sources start to hint at islands stretching out into the Indo-Pacific at about the same time. Such continental writings can provide splendid details or vignettes of island life within the regions that they cover, but again the limits are apparent: geographically limited scope, externally driven agendas, ethnocentric perspectives and a bias towards islands that were on, or over, the brink of wholesale incorporation into extra-insular structures. Even in the Aegean, the area most richly documented by the Greek and Roman authors, textual sources work best when used in close conjunction with archaeology (Snodgrass 1987: 36–66).

Contact period testimonies and ethnographies

A third potential category of information comprises the testimonies of recent eyewitnesses to island societies, such as the navigators of the contact periods, and the ethnographers and others who followed. In the Mediterranean, ethnographies relate, of course, to a late, generally highly integrated phase of island life, and the rich tradition of ethnography in Island South-East Asia (e.g. Sopher 1965; van Leur 1955) should not disguise the fact that here too the region had long been integrated into the Indian and Chinese worlds by trade (Chaudhuri 1985, 1990) and undergone subsequent disruption and reorganisation by the Portuguese and Dutch. This is not to deny the importance of Mediterranean and Indian Ocean sources, but if the aim is to explore societies further from the somewhat familiar terminal of integration, we need to turn elsewhere. In the Caribbean, the period of early contact is poor in sources, apart from Columbus' journal (1492), scraps of navigators' reports, and passages of Las Casas' history (1951). In part this is because the indigenous population was extinguished so quickly, but it is also due to the subsequent encounter with the Aztec and Inca, who provided the Spanish with a far more compelling imperial 'other' to document and destroy. Similar problems attend any study of the guanche people of the Canaries, encountered slightly earlier during exploration of the so-called 'Mediterranean Atlantic' (Chaunu 1979: 106). European reactions to Caribbean and Canary islanders veered between compassion for innocents and contempt for savages, but little thought was apparently given to the possibility that such people had enjoyed an eventful past. Moreover, Greenblatt's analysis of the discourse of such encounters makes a compelling case that they meant utterly different things to the different parties involved, and indeed that there was no true dialogue at all, but merely cultures talking past each other (Greenblatt 1991). His conclusion serves as a warning as we turn to the Pacific, the last and largest world of islands to be 'discovered' by the West, and one that has generated a voluminous corpus of navigators' reports, ethnographies and anthropological literature, which at least ostensibly provides glimpses into something tantalisingly close to the pre-contact past.

Melanesia and Micronesia were known to people outside Oceania earlier than is widely recognised (Meleisea and Schoeffel 1997). Their western fringes had probably experienced sporadic visits by South-East Asian traders from an early date. Spriggs (1997: 223–43) offers a thought-provoking analysis of the Spanish reports of brief encounters with Melanesians in the sixteenth and early seventeenth centuries AD, and speculates on the invisible horizon of epidemic that may have swept the islands in their wake. Further north, the Manila galleons' routes brought Micronesians on Guam into disastrous contact by the later seventeenth century. A trickle of reportage continues through the seventeenth-century Dutch explorers, and swells in the eighteenth century into a spate covering much of the Pacific, with the voyages of Bougainville, Carteret, Cook and other navigators soon to be followed by conquest and a consequent mass of colonial-period records.

But such records must be handled cautiously. Greenblatt's warning is relevant here too, and in addition it is now recognised that the 'golden age' of ethnography and anthropology in the Pacific, of Malinowski in the Trobriands (Malinowski 1922), Mead on Samoa (Mead 1928) and Firth on Tikopia (Firth 1936), was not the epoch of pristine societies that such scholars imagined it to be (and which the points made above suggest never existed), but one transformed by explorers, traders, colonial officials and missionaries (Linnekin 1997). The fundamental problem, as Deetz (1991: 6) and Wolf (1982: 4-5) stress, is that the very fact of contact altered indigenous societies. Spriggs' suggestion that even the briefest of Spanish contacts may have triggered a wave of disease that devastated parts of Melanesia at a time when no one from Europe was present to bear witness has already been noted. Other studies of contact's aftermath emphasise the rapidity of island reorientation. Kirch and Sahlins (1992) argue persuasively that the emergence of a unified native kingdom in Hawaii was encouraged by the activities of European and American adventurers, and that it marked a deviation from pre-contact processes rather than their culmination. At the opposite end of the Pacific, and the scale of action, an analysis of obsidian artefacts from the Admiralty Islands suggests to Torrence (1993) that lithic production underwent a shift in the first phase of sustained contact to production for an incipient collectors' market. In both these examples the proximate agents of change were the same islanders who had met the first Europeans (or at least their close descendants), yet island life had already been reworked by the world-system in which these islands had become involuntarily entangled.

This is not, of course, to argue dogmatically against the usage of navigators' reports, ethnographies and anthropological studies in the reconstruction and analysis of island societies. Some of the earliest contact reports are as close as one can hope to get to snap-shots of a world not yet transformed, even if taken through lenses of uneven clarity and range. They can make useful reference points, as is demonstrated by Irwin's diachronic work on Mailu, a Papuan island trading centre, where they serve as a fair, if slender, anchor to the immediate pre-colonial past (1974, 1985). Such

information can also be useful in illustrating the diversity of island cultures that have existed, so long as explicit recognition is given to the contact- or colonial-period context, and also the fact that some classic anthropological interpretations have been subjected to major revision, for example Malinowski's analysis of the *kula* (Leach and Leach 1983). Moreover, it should not be forgotten that an island's integration is a fascinating field in its own right, exemplified by Kirch and Sahlins' work in Hawaii (1992), or Deagan's in the Hispanic Caribbean (1995). What such warnings do insist upon is that recent accounts cannot be seen as an investigative avenue of any depth into the island past, both because of the post-contact contamination factor, and for one last profound, if very simple, reason.

This reason is the fact that, as Pacific island archaeologists in particular have come to realise, using recent accounts as the basis for talking about the past has the effect of freezing islanders in an unchanging state that denies their past the potential to be substantially different from the ethnographic present (e.g. Kirch 1990: 128–30; this limitation is far from being restricted to island contexts). This is a fatal criticism of the desirability of attempts at island palaeoethnography, a strategy defined by Keegan (1992: 224) as making a 'portrait of a past society built up from traditional ethnographic categories'. Such portraits achieve little beyond a replication of those in the handbooks. They can never extricate their subjects from the ranks of 'the people without history' (Wolf 1982), nor contribute to archaeology's endeavour to provide some intimation, however imperfect and fugitive, of how different much of the past must have been from anything that we, in the present, are ever likely to witness or experience.

The argument returns, fortified, to the initial proposal concerning the centrality of island archaeology in the writing of island history. It should come as no surprise that the first major steps in this direction have been made in the Pacific, where the wealth of contact-period and colonial reports creates a challenging bench-mark in the present, and the virtual absence of earlier texts, together with the problematic nature of oral tradition, dictates that island history from the mid-eighteenth century AD back into the Pleistocene must be island archaeology, or essentially nothing at all. Since the 1970s, Pacific archaeologists have started to plumb this time-depth and have come up with remarkable results. Contact-period structures have been revealed as merely recent configurations among a vast spectrum of alignments that have come and gone over the millennia (for examples: Allen 1977; Allen and Gosden 1991; Irwin 1977, 1983, 1985; Kirch 1986, 1990; Kirch and Hunt 1988; Lilley 1988; Spriggs 1997; Terrell 1986; Wickler 1990). Although this research draws on interdisciplinary data, it shares a firm archaeological perspective as its focus. Notwithstanding those parts of the world where texts come into play earlier, the Pacific revolution confirms island archaeology's potential as the only avenue into most of the past on the majority of islands and, not insignificantly, as the means for writing some very unusual kinds of history indeed.

Insularity: what is an island?

If island archaeology is to generate island histories worthy of their subjects, it would do well to take a more searching look at insularity as a phenomenon. What is an island? Even this apparently innocent question is less simple than it seems. Most people would probably identify a watery surround as the defining feature of a 'true island', with subdivisions into oceanic, continental shelf and non-marine islands often advocated (Whittaker 1998: 7). But other spaces surrounded by something else also qualify for quasi-insular status. The most obvious are 'habitat islands', what Braudel termed 'islands that the sea does not surround' (1972: 160-1). Large-scale examples include oases, lakes, montane valleys, *Inselberge*, inhabitable fragments of the Arctic (Fitzhugh 1997) and those 'islands of the interior' that Veth (1993) identifies in Australia's arid zone. On a small scale, almost any circumscribed area is effectively a candidate. Williamson (1981) cites experiments in simulating insular conditions in environments as varied as mangrove trees and buckets of water. On another level, it is a commonplace that islands are an abiding source of metaphor. What is less often noted is the range of conditions that the metaphor can be deployed to signify. To take three scattered examples, when the Jacobean poet John Donne wrote that 'no man is an Island' (Meditation XVII), he meant something different from Abu-Lughod (1989: 13) when she depicts medieval Eurasia as an 'archipelago of towns' and both in turn imply something different again from Tilley (1994: 166-9, 200) describing a Neolithic enclosure on Hambledon Hill in England as an 'island of death'. Apparently, therefore, islands do not mean the same thing to all of us, even when they are just metaphors, and not really islands at all.

Yet even among true, water-girt islands, insularity can be understood in many different ways. This is in part a function of the enormous diversity of islands: large and small, high and low, solitary and clustered, offshore and in deepest ocean, to mention but a few of the main dimensions of variability. We can start by distinguishing between analytical islands, regions where it is unlikely that pre-modern inhabitants considered themselves islanders, but where insularity is important when analysing flows of people, animals, plants, diseases, or indeed cultural innovations, and perceived islands whose insularity was readily experienced by their occupants. An excellent example of the first category is the fragmenting landmass of Gondwana, later Pleistocene Sahul, and now Australia, New Guinea and their satellites, whose insular status was fundamental to the long-term evolution of fauna, flora and people (Flannery 1994); to this category could be added Greenland and the American continent at Holocene sea-levels. Perceived islands are too numerous to list. But even this distinction must admit a grey area. Within this lie what Held (1989a: 10) has named matchbox continents, sub-continental islands that are large and self-contained enough to act, under some circumstances, as land-masses in their own right. Potential candidates include Madagascar, Japan, Ceylon, Britain and the larger South-East Asian,

Melanesian, Caribbean and Mediterranean islands. An indication that such ambiguities are not unique to our own time can be found in Herodotos' statement, in the fifth century BC, that Sardinia is the 'biggest island in the world' (Book I: 170; Book VI: 1), an assertion of interest because it is wrong even in terms of the size of those watergirt land-masses known in his day – Sicily is considerably larger, and presumably its proximity to Italy compromised its insular status in Herodotos' eyes.

A closer look at perceived islands suggests that even this category is open to cultural negotiation and therefore variation. For example, certain islands that were too large to be taken in at a glance before aerial travel were long ago recognised as islands as a result of voyages of circumnavigation. Thus, the native Cubans described their homeland to Columbus (1492: 59) as a place that required more than twenty days to paddle round. At a subtler level, islanders' views of their insularity and its significance can be domains of active social contention and manipulation. Eriksen (1993) explores a telling example from contemporary Mauritius, whose people either affirm or deny that they are islanders, depending on what they want to say about their identity. A similar rhetoric underpins the current debate over Britain's place in the European Union. Although pre-modern examples of this contentiousness will naturally be hard to prove, far-travelled Cubans, ambivalent Mauritians and confused Britons demonstrate that even the most apparently straightforward categories of insularity are in fact fuzzy, and ones that both islands and islanders cross between, as views and knowledge change.

As the example of circumnavigation has already hinted, seafaring culture (or its absence) plays a key role in defining perceptions of insularity. This issue requires more attention, for what makes true islands interesting is not so much that they are surrounded by another element, but rather that element's nature and what people are able to do with it. Evans (1973: 517-18) observed that water is a different sort of surround from those around the quasi-islands, because for true islands, the sea's role can vary from that of insulator to hyper-conductor. Attitudes towards the sea are culturally variable. They may define the threshold of the unknown at the surf-line, or create almost frictionless highways over the ocean. As Gosden and Pavlides (1994: 170) rightly put it, 'just as the land can be made and remade by human influence, so can the sea'. In fairness, Pétrequin (1993: 45) hints that such a reworking of barriers is not exclusive to true islands: mountains can act as highways as well as dividers, because their emptiness serves to free travellers from the social negotiations that entangle movement in more populated lowlands. But the retort must be that, for true islands, the sea and its mediation by seafaring culture amplify the ambiguities and the flexibility of expression to a unique degree (see Dewar 1997 for an affirmation that the sea-girt status of Madagascar, one of the world's largest islands, was decisive for the development of its long-term history).

This variation in attitudes to the sea, so crucial to the meaning and impact of insularity in a given context, repays consideration at a range of scales. Between large

regions there is palpable variation, witness for instance that seen at a global level in the distance of colonising ventures from continental margins (Keegan and Diamond 1987: 52-7), or contrast the contact-period Tasmanian islanders' reluctance to venture far from the shore (Jones 1977), with many Polynesian groups for whom the sea was no barrier at all (Finney 1994; Terrell 1986: 72). But a similar degree of variation can also be seen within regions and communities. Examples of a specialisation in sea-going that certain islands have fostered (sometimes amounting to maritime monopolies at their neighbours' expense) are recorded in Melanesian ethnography, the Siassi traders being a classic case (Harding 1967), and are common in medieval to early modern Mediterranean history - the Balearics, Kastellorizo and Aegean islands like Idra and the Oinousses all enjoying such status at various junctures. Within communities, variation in knowledge of the sea is illustrated by the status often accruing to experienced navigators (Helms 1988: 86-7; Lewis 1972). Finally, to compound this complexity, it should be recalled that although maritime activity in a given region is liable to be partly conditioned by certain long-term constants, such as geographical configuration and sea conditions, it is also a profoundly cultural practice, and therefore likely to be subject to contingent variation through time.

So what, then, is an island? 'An island', Perec parries (1987: 280), 'is an area surrounded by shores.' This elusive answer is quoted only slightly in jest. For given the multiple ways in which insularity can be defined and experienced, it is surely wisest to give up pursuing the will o' the wisp of an all-embracing formula, and make a virtue of the multiple layers and ambiguities within insularity that have been touched upon above. This emphatically should not imply the abandonment of rigorous analyses for a morass of relativism. Islands are far too interesting, important, and rich in pertinent data for that to be desirable or indeed possible. But it does suggest that an awareness of the degree to which insularity is culturally constructed, open to multiple meanings in a given context, historically contingent, and therefore liable to change, is essential if we are to develop an archaeology of islands that is as sophisticated as its subject demands.

Revisiting some insular stereotypes

The conclusion that insularity is a changeable attribute and one that can operate, at least on certain levels, as a social strategy or way of thinking, allows us to advance beyond some of the cruder stereotypes that have restricted the study of islands, and replace them with more complicated pictures in which the role of human agency is more prominent. Take, for a first example, the question as to whether islands are predominantly bounded and closed systems, as many have advocated (Evans 1973; Fosberg 1963: 5; Goldman 1957; Goodenough 1957; Sahlins 1957; Vayda and Rappaport 1963), open ones receptive to outside ideas, as is also asserted (Kirch 1986, 1988; Kirch and Yen 1982), or torn between the poles of involution and

cosmopolitanism, and archaism and innovation, as Braudel has proposed (1972: 149–50). As the above discussion of island history has already implied, the answer is in fact 'all and none of these', or (better still) 'it depends when, how, and for whom'. It can now be appreciated that what decided where an island lay on the continuum between closure and openness at any one time was to a large degree the decisions or customs of its islanders and those of people in the outside world.

Braudel's superficially attractive vision, in particular, exaggerates the extent to which islands have been tugged between the terminals of the scale, and underestimates the extent to which they have fluctuated subtly around the middle of the range. Another over-simplification is surely his image of large islands as involuted mini-continents with 'stagnant centres' (Braudel 1972: 150-1), a characteristic earlier noted by Myres (1941: 139) in the case of Archaic-to-Classical Crete. For at other times, the same island can behave quite differently, as is shown in the Cretan context by the extent of the island's Minoan, Phoenician, Roman and Venetian trade networks. We should, parenthetically, also beware of 'stagnation' as a concept, as it may disguise plenty of reticulate history. To take another example, Aboriginal Australia's slight take-up of external innovations (e.g. dingos, Polynesian-style fish-hooks in the east, and outrigger canoes on the coast opposite New Guinea) was not a product of the island continent's physical closure as such – indeed these introductions, plus the visits by Island South-East Asian sea-slug collectors (Flood 1995: 258), demonstrate that its coasts were permeable – but rather of the cultural closure of Australian societies to most exotic things and ideas. The issue was not one of availability but of decisions to adopt or reject innovations (Lemonnier 1993; van der Leeuw and Torrence 1989). It would be naive to say that Aboriginal Australia was stagnant; its history was simply configured in a manner unfamiliar to Western eyes.

A sharper focus also begins to emerge on the factors lying behind the 'esoteric efflorescence' of extravagant monument-building that Sahlins (1955) first identified on certain isolated islands, of which the two most oft-cited examples in the archaeological literature are Easter Island and Malta in the Temple (principally the Ggantija and Tarxien) periods (Evans 1977; Renfrew 1973a: 147–66). In fact, these cases reflect very different forms of isolation. Easter Island, although frequently cited as a good example of an isolate, is a unique case, the exception that proves the rule of a predominantly cultural definition of closure. For there is simply no parallel for an island with long-term habitation, yet without inhabited neighbours and (after total tree-felling) entirely devoid of the means to build boats with which to travel elsewhere. Easter is sui generis, an analogy for nothing except the Earth's ecosystem, humanity's only other truly bounded world that cannot be left for any greater distance than the equivalent of an offshore paddle, at which point the analogy starts to become as horrifying as it is enlightening (Bahn and Flenley 1992). Malta is different. Although in Mediterranean terms Malta is small and relatively distant from other land, recent work has demonstrated that throughout most phases of the island's early settlement, except the Temple periods, the island maintained contacts with neighbouring areas (Stoddart *et al.* 1993: 7). Rather than inevitable closure leading by degrees to efflorescence, what seems more plausible is closure agreed upon or imposed, as presumably one element in a set of social strategies that *enabled* colossal monument building. Whatever happened on Malta happened not because the island was intrinsically isolated, but because it was far enough from other land, in Neolithic terms, to make itself isolated if its islanders (or at least some decisive people on the island) wished it to be so. Suggestions that isolation was created by internal social change, rather than creating it, are now being proposed for late pre-contact Polynesia (Terrell *et al.* 1997: 165) and the matchbox continent of Madagascar as its interior become thickly settled after the destruction of the Indian Ocean trade by the Portuguese (Dewar 1997), and may also be relevant to inward-looking societies on Bali.

Thinking of insularity as a cultural construct also sheds intriguing light on some of the processes that commonly occur during the formation of an island society and, at the other end of island history, under conditions of rapid incorporation by continental powers. Both subjects are too extensive to be more than touched upon here, but a few salient points can be made. One concerns the role of 'founder effects', a term coined by Mayr (1954) as an evolutionary concept, but borrowed by anthropologists and others (e.g. Vayda and Rappaport 1963: 134-5) to explain why island societies commonly lose elements of the parent culture from which they originate, and why some features that are retained deviate in unusual ways. In many cases, this undoubtedly can be explained as a result of the constituents of the sub-sample of a parent population that the colonists comprised, from genuinely irreparable loss of people, skills and knowledge in transit or after landfall, or from cumulative forgetting in conditions of slight external contact. But it is worth considering that, in some instances, loss of cultural traits, deviation, and the curation of archaisms were strategies through which island identities were created and sustained by people who remained aware of how things were done elsewhere. These alternatives will always be hard, and often impossible, to discriminate archaeologically, but the latter explanations assuredly deserve more attention than they have received. An intriguing example in this respect comes from the early period of agricultural settlement on Cyprus, known as the aceramic Neolithic. Several salient characteristics of its well-explored seventh millennium Khirokitia phase, such as archaising round-house architecture, absence of cattle and pottery, and marked paucity of imports (despite inter-visibility with the Anatolian mainland) have been taken to demonstrate the isolated state of the first farmers and their descendants (Cherry 1985: 26-7). Recently, however, evidence has emerged of an antecedent late ninth- to eighth-millennium phase, contemporary with the late prepottery Neolithic of the Levant, in which imported obsidian is much more common and cattle were probably also present (Briois et al. 1997; Guilaine et al. 1995; Simmons 1998). These new data imply that the idiosyncrasies of the Khirokitia phase resulted from decisions made well after the inception of farming, and that the distinctive island

identity that these idiosyncrasies reveal was forged at least in part via a rejection not only of mainland contacts (as in the case of Temple period Malta) but also of mainland traits, including some already introduced to Cyprus (e.g. cattle) and others developing in mainland areas with which the islanders had trade contacts (e.g. pottery production).

Turning to islands' ultimate incorporation by continental systems, one common factor is that this has tended to occur when islanders lost control over the definition of their own insularity. Fosberg (1963: 5) portrays islands as enjoying 'protection from outside competition and consequent preservation of archaic, bizarre, or possibly illadapted forms' leading to 'extreme vulnerability, or tendency towards great instability when isolation is broken down; and tendency to rapid increase in entropy when change has set in'. For island ecologies this may be correct, but for island societies this picture is far too simple. What mattered for an island society was not that it managed to isolate itself (often difficult and, in many instances, apparently not desirable), but that it could determine on whose terms cross-cultural interaction took place. Examples of flourishing interaction over extended periods between islands and continental areas were commonly possible because superior seafaring allowed the island societies concerned to interact on their own terms, and often at points of communication located in continental territory. Once continental powers started to intensify their own long-range seafaring activities, as started to happen fitfully from the second millennium BC in the Mediterranean, throughout the first millennium AD in the Indian Ocean, and (in the form of European navigation) during the middle to late second millennium AD in the Atlantic and Pacific, island societies became increasingly unable to define and maintain their own insularity, save in resistive terms, and thereby lost the ability to control much of their own history.

The analysis of islandscapes

A more flexible approach to insularity, and one that incorporates the sea and maritime culture as components of its definition, also prompts reconsideration of the best way to approach island landscapes and seascapes, or in effect *islandscapes*. The evidence that islanders have regularly changed the ecological face of islands was noted earlier. But an examination of the many dimensions of insularity implies that islandscapes are liable to have been reworked by islanders in other ways too. The physical properties of islands, such as size, location, configuration and topography provide general constraints and openings, a point to which we will return below when assessing the relevance of island biogeography to island archaeology. But this does not deny the fact that conditions on most islands were sufficiently generous to allow people to define their surroundings in multiple ways. There are likely, in other words, to be plenty of opportunities for island culture to act back on the physical framework, with different islanders ordering it into a range of patterns at different times. As Gosden and Pavlides (1994: 169) have put it, 'individual island landscapes respond to the connections in

which they are enmeshed and the demands that these networks create'. In colonial contexts unsustainable patterns were sometimes forced on islands by newcomers with alien political, ideological or economic agendas, as is nicely illustrated by the Norse settlement of the north Atlantic islands (Amorosi *et al.* 1997) or the counterfeit Europes imposed on temperate islands and continents across much of the world over the last few centuries (Crosby 1986).

A revision of the assumptions that island archaeologists bring to the exploration of islandscapes is more than timely, given the recent loss of innocence in landscape studies in and beyond archaeology, itself one element of post-modern geography (Soja 1989). Landscape seen as a usefully ambiguous category (Gosden and Head 1994), as a constructor of, and yet also constructed by, individual and collective memory (Bradley 1993; Küchler 1993; Schama 1995), as imbued with many contested meanings (Bender 1993; Cosgrove 1984), and as experienced by passage through it (Tilley 1994): all of this range of possibilities have manifest applications in the diverse, counter-intuitive, Alice-through-the-looking-glass world of islands. Yet save for Gosden and Pavlides' short paper and Patton's call for an 'island sociogeography' (1996), the potential has so far gone unrecognised. What, then, might a new approach to islandscapes involve?

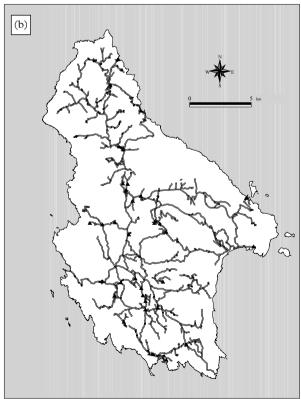
First, the diversity of ways in which islanders perceive land and sea, together with the physical diversity of islands themselves, argues that there is no intrinsic reason why unitary islands should be the primary blocks from which island people constructed their worlds - nor, equally, through which we do best to analyse them. MacArthur and Wilson's The Theory of Island Biogeography (1967), a book to which the argument will return shortly for other reasons, contains a statement that has subsequently become something of a catechism for island archaeologists: 'In the science of biogeography, the island is the first unit that the mind can pick out and begin to comprehend' (MacArthur and Wilson 1967: 3). Despite the beguiling simplicity of this proposal, and its continuing relevance in island biogeography, no such assumption can in fact be made when analysing human societies on islands. In island archaeology, the identification of the island as the primary unit is simply an imposed view: the most obvious unit that we can pick out. But 'the island' is just one point on a spectrum of potentially relevant frameworks ranging from a patch of coast to entire island groups, and beyond; it may prove to be of special relevance in a particular spatial, temporal, social or political insular context, but equally it may not.

Empirical observation could indeed have told us this long ago. Thinking simply of topography, among dense archipelagos of high islands (a common insular setting), the difficulty in crossing a rugged interior can easily bring adjacent coasts of different islands closer to each other than each is to the far side of its own island. Equally, in a clusters of very small islands, interdependency may render the cluster as a whole more significant than its individual constituents. But it is also apparent that social formations, as well as the definition of political and ritual territories, need not be congruent

with the limits of an individual island. Terrell (1977a: 66-9) warns against assumptions of island homogeneity and demonstrates the converse among people on Buka and Bougainville. In the Caribbean, Atajazido phase pottery styles suggest that, among the larger islands, the foci of group identities lay not within the islands, but on the straits between them (Rouse 1977: 7). In Polynesia, society on larger islands commonly split into ramages. Others (e.g. the Hawaii chain) were contested territories, and small islands were often grouped into wider chiefdoms, like the Marquesas, Cooks and Tuamotus (Kirch 1984). In the Archaic and Classical Aegean, two of the Cyclades spawned several independent polities (four on Kea, three on Amorgos), island cults such as those of Delos and the Kalaureian Amphyctyony on Poros acted as the centre of networks incorporating both islands and a mainland fringe, and major island cities off the Anatolian coast, such as Rhodes and Samos, controlled extensive lands on the mainland opposite (Fraser and Bean 1954; Shipley 1987), an economic symbiosis of island and mainland that more or less survived until the imposed boundaries of the twentieth century AD. On the margins of Neolithic Europe, Maltese temples aligned themselves on Sicily, although the latter lay over the horizon (Stoddart et al. 1993: 16–17), and in Jersey, activity at La Houe Bie can be understood in terms of the landmark's visibility from France (Patton 1991). This list of examples is necessarily selective, and could be extended considerably.

A second point concerns the angle of vision that we adopt when visualising and analysing islandscapes. Maps are one way of representing islands, but islanders would see things differently. Indeed a cartographic presentation, in which islands appear as a scatter of discrete points of land in the sea ('the first unit that the mind can pick out and comprehend') gives priority to the one viewpoint that no ancient islander could ever have experienced (fig. 2). Maps are hard to avoid using, but they do not inform us of the raking, sea-level views that made up the islanders' own perception of islandscapes, and which must have heavily influenced how they put these together. Helms (1988: 24–8) makes the point that this oblique vision, that divides the islandscape into land, coast, sea, horizon and sky (three broad bands and two liminal zones), may even encourage a similar cosmological division. Also significant is the fact that islanders (as indeed most people before the expansion of modern cartography) employed mental maps to locate distant points, in which travelling time, direction and landmarks were remembered in sequence, the periplous tradition mentioned earlier being essentially a commitment of this sequence to writing (Frake 1985; Lewis 1972). Navigation under such conditions is in large part an art of memory, drawing upon experience, inherited knowledge, stories (both 'real' and mythic) about the things that have happened along the way, and names given to places as a result of their history. Difficult as it is to address such issues in the context of early island societies, and impossible as it is to abandon maps as a mode of representation, if we aim to draw more than superficial pictures of the island societies of antiquity, we will have to take such factors into account as fully as possible.





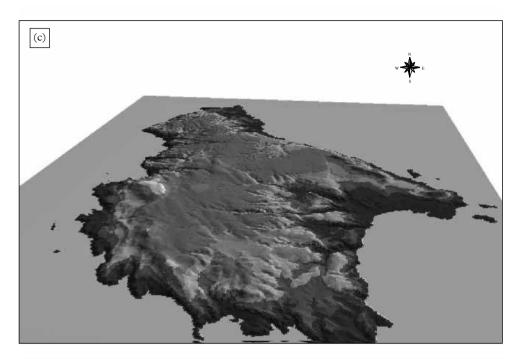




Fig. 2 Ways of visualising islands and islandscapes – Kythera in the south-west Aegean: (a) Venetian map, 1572, (b) twentieth-century AD map, (c) three-dimensional view derived from digital elevation model, (d) sea view from the east. (a) by permission of the British Library.