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**Settlement and Community:
Their Location, Limits and Movement through the Landscape of Historical Cyprus.**

Luke Hayward Sollars

This thesis is submitted in fulfilment of the requirements for the degree of Ph.D. in the Department of Archaeology at the University of Glasgow, April 2005.

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Abstract

Settlement is an inevitability of human presence in a landscape; a collection of houses indicates settlement, but so too does a field system – the farmers must live somewhere. Wherever there are people there will be settlement, from large concrete and glass urban centres to the tented impermanence of a nomads' camp.

Settlement is a result of the human presence, but remains a sterile idea without some discussion of community. Certainly settlement can be studied without community, but it remains an abstract assembly of parts unless the people that constructed or occupied it are taken into account. A single settlement is home to numerous communities that continuously form, divide and reform in response to the changing practical and social situations that everyday life presents.

Before any settlement is established a series of decisions has to be made with due consideration of an area's topography and natural resources, as well as existing settlements in the landscape and any established social, economic or political systems. Physical considerations such as a settlement's location and extent, or the definition of its boundaries, can be viewed individually, but are more usefully considered in conjunction with one another so that a settlement is treated as a working unit that is part of a wider system, rather than an abstract collection of components.

This thesis approaches questions of settlement and community in historic Cyprus – from the Late Roman period to the end of the Ottoman period – through a

presentation of the experience and results of fieldwork I carried out in 2003. The fieldwork comprised a survey project specifically conceived, planned and executed by myself for my PhD research. It focused on three discrete areas of Cyprus: Akrotiri, a low-lying area of salt marsh, batha and citrus groves in the south of the island; an area of agriculture and coastal maquis on the west coast, north of Peyia; and the Nikitari village territory, which stretches from the southern margins of the Mesaoria up into the lower reaches of the Troodos mountains. The topographical cross section evident in my chosen areas gave me the opportunity to study the diversity of settlement across most of the range of habitats of the island, from the coast, through plains, scrub and foot hills, to all but the highest reaches of the Troodos mountains.

My experiences in the landscape undoubtedly influenced my observation, recording and interpretation of material evidence in the field, and are a vital, if elusive element of my data. I have exploited their influence to make my presentation the landscape I perceived coherent and vivid. Whilst they could not give me a complete understanding of the experiences of the erstwhile occupants of the settlements I have studied, my own experiences do lead me toward it through an appreciation of the landscape and the considerations necessary for anyone living, working or travelling in it.

Through my data I examine the location of settlements in the landscape and their changing distribution over time, before endeavouring to identify evidence for community amongst the physical remains in the landscape.

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CD containing the project database and a small selection of photographs inside back cover – Microsoft Access 2000 required.

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All maps, sketches, digitised figures and photographs were drawn, produced or taken by myself, except for Figure 4.18, which was taken by Kristina Winther Jacobsen.

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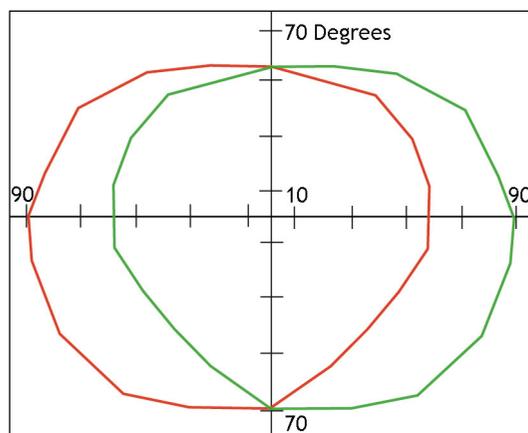
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Towards using this volume.

First things first – why is this thesis on its side?

I believe that the landscape orientation of the page will make it easier for readers to assimilate the information in front of them when it is presented in a format more naturally suited to their field of vision. Each of our eyes picks up visual data from a roughly circular field; in combination they give us an elliptical field of vision (Grüsser and Landis 1991) into which a landscape page fits neatly. This is also, presumably, why cinema opted for the wide-screen, rather than tall-screen, format.

My M.Phil. research (Sollars 2001) addressed the presentation of archaeological data; I felt that many archaeologists were not doing themselves justice when it



The fields of the left (red) and right (green) eyes combine to give us an elliptical field of vision. After (Grüsser and Landis 1991: fig. 9.8).

came to the communication of their findings and ideas, either to other archaeologists or to a wider public. That dissertation might well have been the place for experimentation with the physical presentation of data, words and graphics, but I was still too bound by the considerable tradition of the A4 portrait page. This tradition is so ingrained that the British Standard (B.S.I. 1990) on which most of Glasgow University's guidelines are based simply states that theses and dissertations be presented on an A4 page, with no mention of orientation.

At the beginning of my M.Phil. year I was reintroduced to the idea of mind maps, (Buzan and Buzan 2003) and decided to experiment with them throughout the process of research, note taking, planning and writing my dissertation. One of the first things that a mind map neophyte does is turn their paper to a landscape orientation. The habit stayed with me and, soon after I began my Ph.D. research, I began to experiment with page layouts, and before long settled upon the one used for this thesis.

Many of the archaeological reports that I studied for my M.Phil. presented some data on a landscape page – pollen diagrams are a prime example – and I found myself turning the book around to study them, losing my place and the thread of the text in the process. If the page is permanently turned on its side there are far fewer, arguably no, occasions when it is necessary to present data in a different orientation; standard illustrations and tables will fit on one half of the page, whilst wider ones simply spread across both columns.

My preference was instinctive, but I remain convinced that it is a far more efficient way to use the page and, after an initial reaction along the lines of ‘won’t that make it more difficult to read?’ I have found that most people who encounter the format have come round to the idea. It requires the reader to learn a new way of flicking through the pages, but with that done the ease with which the data can be viewed on the page should mean that the unusual presentation fades into the background, and ceases to be remarkable.

This section now continues with some brief notes on some formats and conventions used in this thesis.

Italics

Foreign and transliterated words are printed in italics. The exception to this rule is place names; when village and locality names are given together, the village name is given in roman type, with the locality name in italics. When the locality is used on its own, to identify a SERF for example, it is given in roman type. So Nikitari *Mandres ton Rotson* would refer to a locality in the upper Rotson valley, but Mandres ton Rotson (SE0030) would identify the small, Roman, working settlement recorded there.

Italics are not used in the glossary.

Translation and transliteration from the Greek

One of the problems with transliterating Cypriot place names is the number of people that have done it before, and the number of different preferences or official policies that may have been adhered to or ignored. It is not unknown for different spellings to appear on different parts, or adjacent sheets, of the same

map. Different maps, at different scales, do not always agree on the classification of watercourses and whilst one may assign *argaki* another will favour *potamos*. The reality on the ground often failed to reflect preconceptions of either streams or rivers. I have taken most of my spellings from the 1:5,000 cadastral plans produced by the Department of Lands and Surveys as these offered a large scale and a generally comprehensive regime of labelling.

Village and locality names

In Cyprus villages are administrative areas with defined boundaries. Within every village territory there are loosely defined areas known as localities. These have no precise boundaries, and their extent is often a matter of personal interpretation. The names often describe the local topography, a former use of the area or a previous owner of the land and can be a useful, if variable, source of additional information for the survey archaeologist.

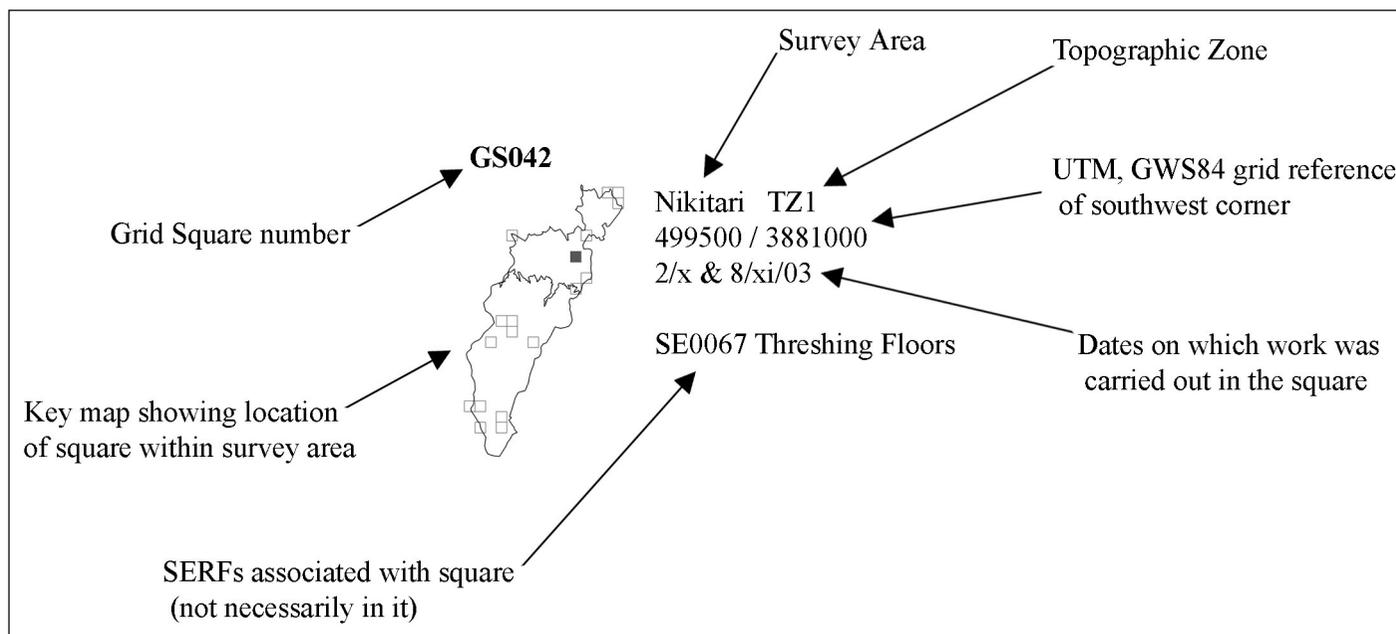
Sketch maps and drawings

Some of the maps and drawings in the text have been scanned direct from a SERF or a notebook; others were digitised in Adobe Illustrator. It should be kept in mind that, despite looking extremely precise and accurate, the digitised drawings are still sketches with all their measurements either estimated or paced out. The maps, particularly those that were created in ArcGIS, incorporated features such as roads, tracks, rivers, gullies and contour lines some of which were taken from my own sketches, others were recreated from GPS waypoints, and many were digitised from a variety of maps and plans at several different scales.

Grid Square headings

Each grid square description in Chapters 4, 5 and 6 is preceded by a graphical summary of the square. A key map showing its location within the survey area is accompanied by the survey area and the topographical zone in which the square falls. This is followed by the WGS84 grid reference of the southwestern corner of the square; the dates on which work was carried out; and such SERFs as were

associated with the square. Those SERFs that did not fall within a grid square are listed under the one with which they were most obviously associated – usually the closest. The key maps included in these headings are self-explanatory elements of the title sequence and consequently are not included in the list of figures at the beginning of the thesis.



Explanation of graphical Grid Square headings in the data chapters.

Glossary of terms

a.s.l.	Above sea level.	capers	Capparis spinosa. Thorned shrub that grows on rocky slopes, field margins and batha/garrigue. Tender shoots, flower buds and young fruits are often pickled (Tsintides <i>et al.</i> 2002: 162).
argaki	Stream. e.g. Argaki ton Rotson – Stream of Rocks.	check dam	Soil retention measure. A wall, built across a natural gully, behind which rain-washed soil and organic matter accumulate. The resulting patches of fertile soil are often cultivated.
asphodel	Asphodelus microcarpus. White spikes of flowers on a single, branching stalk up to 1.5 m tall. Often found on derelict or overgrazed land (Polunin and Huxley 1990: 208).	chiftlik	Ottoman estate - also spelt çiftlik.
Attila Line	Line dividing North and South / Turkish and Greek Cyprus since 1974. See also Green Line.	cistus	Cistus creticus. Rock Rose. Shrub common on rocky slopes in forest and scrubland, grows up to 1.5 m tall. Sticky resin exuded from leaves collected in the past for use in medicine and perfumes (Tsintides <i>et al.</i> 2002: 289).
Ayia	Saint (female). Occurs in place names e.g. Ayia Paraskevi.	database	Relational computer database constructed in Microsoft Access 2000 for this project.
Ayii	Saints (plural). Occurs in place names e.g. Ayii Phanendes.	doukhani	Threshing sledge. A doukhani blade is a small, worked stone, many of which are inserted into the bottom of the sledge to cut the wheat stalks and separate the grain from the chaff.
Ayios	Saint (male). Occurs in place names e.g. Ayios Yeorgios.	dichoro	Double width house with a separating wall supported on a beam or an arch along the long axis (Ionas 1988: 46-48, 199-201).
background confusion	A measure of how often you bend down to investigate a piece of material culture only to find that it is anything but pottery (Chapter 3).	dromos	Entrance passage to an underground tomb.
batha	Low scrub, <1m tall. Dominated by Spiny Burnet and Thyme.	forest	Greater than 50% canopy coverage. Pine always dominant.
Buffer Zone	Neutral area along either side of the Attila line. Patrolled by UN troops.		
BUnnnn	Building Unit number. A unique identifier assigned to each building unit recorded by TAESP. BU plus 4 digits e.g. BU0073.		
cafeneion	Coffee house.		

francomato	(pl. francomati) Free, peasant, householder in the medieval period.		The edible fruit are possibly the lotus of the Lotus Eaters in the Odyssey (Tsintides <i>et al.</i> 2002: 272).
freestyle	Method of covering ground in a Grid Square where there was insufficient accessible ground to walk passes.	juniper	Coniferous shrub, primary component of maquis.
garrigue	Scrub, 1-4m tall.	kato	Lower. Often used in village names. e.g. Kato Arodhes.
	Dominated by jujube, broom and mock olive.	leat	Channel feeding water to top of a watermill's penstock.
GIS	Geographical Information System.	lentisc	<i>Pistacia lentiscus</i> . Evergreen shrub/small tree. Grows up to 4m, very common in rocky places, sand dunes and pine forests (Tsintides <i>et al.</i> 2002: 260).
golden oak	<i>Quercus alnifolia</i> . Evergreen oak, common above 700 m a.s.l. on rocky slopes and mountainsides. Grows up to 10m tall (Tsintides <i>et al.</i> 2002: 116).	mandra (pl. mandres)	Sheep or goat fold.
GPS	Global Positioning System.	maquis	Scrub, 1-4m tall, consisting of low pine and oak, or juniper and pistachio. Often associated with forest.
Green Line	Section of Atilla Line running through Nicosia/Lefkosia, often applied to the whole length of the line.	Mesaoria	Large, fertile plain covering much of north, central Cyprus.
grid square	Basic unit of recording evidence in the field (Chapter 3).	milk vetch	Plant with large seed pods that rattle when dry. Found on mountain slopes, under pine cover, above about 700 m a.s.l. Used as a fodder crop.
ground visibility	A measure of the extent to which the ground being surveyed is obscured by vegetation (Chapter 3).	mono-survey	Archaeological field survey project with fieldwork carried out by a lone archaeologist.
GSnnn	Grid Square number. GS plus 3 digits, e.g. GS004 (Chapter 3).	mosphilo	<i>Crataegus azarolus</i> . Mediterranean Hawthorn. Tree growing up to 10 m with large yellow haws, used for making unpleasant jam (Tsintides <i>et al.</i> 2002: 190).
halloumi	Ubiquitous, firm cheese made from goat or sheep's milk.	mountain method	Approach adopted to cover grid squares in the mountains, where standard passes were impractical.
inula	<i>Inula Viscosa</i> . Clammy Inula. Shrub with strong smell, favouring disturbed ground on hillsides and beside roads. Grows up to 1.5 m, often in moist conditions (Tsintides <i>et al.</i> 2002: 407).	myrtle	<i>Myrtus communis</i> . Evergreen shrub growing up to 3 m tall, usually in moist places (Tsintides <i>et al.</i> 2002: 308).
jujube	<i>Zizyphus lotus</i> . Lotus tree. Shrub with long spines. Grows up to 2m tall on fields, wasteland and roadsides.	open forest	Canopy coverage of 10-50%. Pine always dominant.

opportunistic survey	Recording settlement evidence encountered by chance outside a systematic grid square (Chapter 3).	Rhizocarpon tinei	Lichen whose slow, uniform growth rate makes it a useful aid to broad dating of abandoned structures (Noller and Locke 1998).
pano	Upper. Often used in village names. e.g. Pano Arodhes.	samphire	Inula crithmoides. Golden Samphire. Succulent shrub that grows up to 0.8 m tall beside salt lakes and seashores (Tsintides <i>et al.</i> 2002: 406).
passes	Usual approach to systematically covering ground within a grid square. Ten passes, 50 m apart were walked across each square.	SEnnnn	Settlement Evidence number. SE plus 4 digits, e.g. SE0017 (Chapter 3).
patikha	Water melon.	SERF	Settlement Evidence Record Form (Chapter 3). The term came to refer to the evidence recorded on the form, so that a particular incidence of settlement evidence was known as a SERF. It also developed into a verb, and the act of filling in a SERF, at a SERF, was known as SERFing.
penstock	Tower built to provide sufficient drop for water driving a mill.	settlement evidence	A wide-ranging term that allows the recording of archaeological evidence that indicates permanent occupation, as well as the settlements themselves. Broadly similar to POSI (Chapter 3).
pine	Pinus brutia. Calabrian pine. Dominant forest species, grows up to 25 m tall, on lower mountain slopes up to 1400 m (Tsintides <i>et al.</i> 2002: 77).	SIA	Special Interest Area, a broad, multifunctional, diachronic area often incorporating several POSIs (Given and Knapp 2003: 28).
POSI	Place Of Special Interest, a definition enabling the archaeologist to define a broader spectrum of elements than 'site' (Given and Knapp 2003: 28).	socle	Stone built base of wall to which courses of mud brick are added.
potamos	River. e.g. Potamos tis Elin Petras – River of Olive Stones.	spiny burnet	Sarcopoterium spinosum. Small, many branched shrub growing up to 0.5 m in impoverished areas. Major component of garrigue (Tsintides <i>et al.</i> 2002: 180).
purposive survey	Recording settlement evidence outside a systematic grid square previously located by others (Chapter 3).		
quoin	External angle of a structure, often made from larger, or better worked blocks than the rest of the wall. Is also applied to the individual blocks.		
RAF	Royal Air Force.		
RAF Akrotiri	RAF base, which occupies the southern third of Akrotiri peninsula.		

spitaki (pl. spitakia)	Field shelter. Small, usually found at the edge of fields or vineyards.	Vlach	The Vlachs are an ethnic group living in isolated pockets in Greece and the Balkans, they speak a language like Romanian.
systematic survey	Planned survey and recording of landscape and evidence lying within grid squares (Chapter 3).	waypoint	Map reference recorded with GPS hand unit.
TAESP	Troodos Archaeological and Environmental Survey Project.	WGS84	Mapping datum used by more modern maps in Cyprus and my GIS.
terebinth	<i>Pistacia terebinthus</i> . Deciduous shrub/tree growing up to 6 m tall on rocky mountainsides, in pine forests, maquis and garrigue (Tsintides <i>et al.</i> 2002: 257).	WSBA	Western Sovereign Base Area. Area in south of island under British administration.
topographic zone	Broad divisions within survey areas (Chapter 3).	WSBAAS	The Western Sovereign Base Area Archaeological Society.
TPnnn	TAESP POSI number. A unique identifier assigned to each POSI recorded by TAESP. TP plus 3 digits, e.g. TP061.		
TSxx	TAESP SIA number. A unique identifier assigned to each SIA recorded by TAESP. TS plus 2 digits, e.g. TS09.	Period definitions	
TZnn	Topographic Zone number. TZ plus 2 digits, e.g. TZ1 (Chapter 2).	Early Bronze Age	2500 – 2000 B.C.
urginea	<i>Urginea maritime</i> . Sea Squill. A single, long, dense spike of white flowers growing up to 1.5 m tall. Growing on sandy, rocky hills and slopes (Polunin and Huxley 1990: 214).	Middle Bronze Age	2000 – 1600 B.C.
UTM	Universal Transverse Mercator. Standard map projection used for maps in Cyprus.	Late Bronze Age	1600 – 1050 B.C.
		Iron Age	1050 – 475 B.C.
		Classical	475 – 312 B.C.
		Hellenistic	312 – 31 B.C.
		Early Roman	31 B.C. – 300 A.D.
		Late Roman	300 – 650 A.D.
		Byzantine	650 – 1191 A.D.
		Medieval	1191 – 1571 A.D.
		Ottoman	1571 – 1878 A.D.

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1 Introduction

Settlement is an integral element of human presence in a landscape; most of us live in one, and it is this very familiarity that makes them fascinating. Settlement is so much more than scattered pockets of population, however large; it is the living, the using and the experiencing of the world. By studying settlement at large rather than settlements in isolation we are better able to build up a comprehensive picture of past peoples and landscapes from a level that encompasses the majority of the population, rather than the elite minority. The archaeology of settlements and settlement patterns leads far more often to the prosaic than to the exotic, but the everyday nature of villages, farmsteads, isolated *mandres* and the spaces in between them stand a far better chance of taking us close to the heart of daily life and the routine of a society, than do the more exotic images derived from the rarefied levels of palaces, castles or temples.

In this thesis I address five main research questions. Two of them are broader, more theoretical issues, whilst the remaining three are more closely tied to Cyprus and to my own data. Firstly I look at the physical nature of settlement, its composition and location in the landscape. By expanding considerations of the location of individual settlements I am able to address their distribution within the landscape, and the broad chronological scope of my study ensures that changes in those distributions also become evident. My second area of discussion is community. I address its nature and composition, but go further to consider the manifestation of community in the material record, as well as its relationship to the physical evidence of settlement in the landscape.

The third area to be addressed is the effect of changing rules of landownership and population levels upon the distribution of settlement in Cyprus between the 4th and 19th centuries A.D. This is of particular interest with reference to the many medieval villages that were abandoned or even disappeared during the period of Ottoman rule. My fourth line of investigation considers the extent to which settlement patterns within a largely agricultural economy were influenced by the different ways in which natural resources were exploited. This includes the way in which economic communities reliant upon other sources such as pastoralism, forestry or, in the Roman period, copper mining were integrated into the wider patterns of occupation in the landscape. My final question is concerned with the most dramatic change in the patterns of settlement on the island. I question the oft-asserted claim that Arab raids between the 7th and 10th centuries were the sole reason for the abandonment of coastal settlement sites.

Settlement is one of the basic blocks from which archaeologists build up the patterns that aid them in their interpretations of the landscape. Exactly what a settlement is can be rather harder to pin down (Sollars 2005); I disagree with Goodwin's (1984: 20) definition that demands 'at least three households in residence in close proximity over an extended period of time.' Settlement is not a point along a scale, a measurement of size, rather it is the scale itself; a settlement is a place where people live and as such may range from a small farmstead all the way up to one of the 21st century's mega-cities.

Along the scale of settlements appear hamlets, villages and towns. These are familiar terms to all of us, and key to the study of settlement, but they should be used with the understanding that they are not immutable, and may be interpreted differently by different people in different regions (Grivaud 1998: 37-48; Roberts 1996: 16-19). It is not my intention to present a typology of terms for Cypriot settlement; to do so would be futile given the restrictive nature of such a list, and the diversity of examples that it would have to incorporate. Instead I identify and assess each example of settlement or settlement evidence within its own context. In addition to the more general 'settlement' I restricted myself to four terms: farmstead, village, town and city. None are precisely defined, but between them they cover all the incidents of settlement I encountered during this project. Having identified settlements it is necessary to go beyond plotting their positions on a map as this says little of the social relationships and networks that exist within any landscape. By studying the spaces in between in conjunction with the settlements themselves, by taking a landscape perspective, a closer understanding of the groups and individuals that lived, worked and interacted within a region becomes a realistic proposition.

Settlement cannot exist without human input; even the straightforward, physical study of bricks and mortar is reliant upon it. Whilst largely concerned with objects in the landscape, the study of settlements and their distribution is reliant upon human activity and interaction. When the human inhabitants of a landscape are considered a discussion of community becomes not only possible, but essential. There are those, as with settlement, that seek to limit the term 'community' to a point on a scale (e.g. Kolb 1997: 266; Lightfoot *et al.* 1998: 206), whereas I suggest that it too is the scale itself. My interpretation has much

more in common with Anderson's (1991) imagined community, which grows out of the feeling of common experience between a group of people rather than their number, or their settlement (Isbell 2000: 248-250). I address the evidence for this sociability and community of common experience amongst the physical evidence in the landscape. I also assess the community's role within the settlement and beyond it as a cohesive and creative influence on the creation of networks of habitation across the island.

By beginning to extract concepts such as community from the material of structure, we move far closer to the inhabitants of the landscape under scrutiny, but it is difficult to claim that we could ever experience or understand the world as they did. Without adopting a directly phenomenological approach (Tilley 1994) I have taken my experience in the landscape and sought to integrate it with my interpretations in an effort to present a more comprehensive picture of the settlements and communities that occupied the space in the past. By better understanding populations and their habits through a consideration of their settlement and community we may gain a fuller understanding of the social, economic and political organisation of Cyprus during the studied periods.

In the past 'settlement archaeology' (summarised in Knapp 1997: 2) has focused on sites and the reconstruction of sites. Settlements have often been investigated in isolation rather than within the broader system of local, regional or international networks. If we concentrate too closely on sites and monuments we can lose sight of the fact that archaeological evidence is not restricted to a few obvious areas of activity but rather that it spreads across the landscape in a blanket of varying density (Darvill 1997: 74-75; Joffe 1993: 11). By studying

entire landscapes, rather than individual sites, and by taking into account the interaction between the beliefs and practices of past populations, as well as the social structure and physical space in which they existed, 'landscape archaeology' is able to move beyond descriptions and site hierarchies to interpret patterns across space and time that are revealed in the material culture (Anschuetz *et al.* 2001: 170; Knapp and Ashmore 1999).

This broader, more integrated view of archaeology and the landscape has become well established over the past twenty-five years and has been adopted by an increasing number of archaeologists. Regional survey projects such as the Northern Keos Survey (Cherry *et al.* 1991), the Biferno Valley Survey (Barker 1995), the UNESCO Libyan Valleys Archaeological Survey (Barker 1996) and the Pylos Regional Archaeological Project (Davis *et al.* 1997; Zangger *et al.* 1997) have all gathered the broad ranging data that make it possible to address relationships between individual settlements, as well as between the settlements, their inhabitants and the landscape in which they are located. There are compromises to be made, of course, but intensive survey techniques offer a combination of the wide-ranging extent of earlier, 'site-hunting' surveys and the localised detail retrieved by excavation.

Whilst still outnumbered by excavations on Cyprus, as elsewhere, the field of archaeological survey is steadily growing and constantly developing. Work carried out by the Department of Antiquities between 1955 and 1976 was primarily concerned with the identification and recording of archaeological sites in an attempt to prevent their destruction and to encourage further archaeological research (Cadogan 2004; Hadjisavvas 2004; Iacovou 2004b). The projects based

at academic institutions outside Cyprus that were thus encouraged have continued the Department's work, developed more intensive and systematic survey methods, and in many cases broadened its original scope beyond individual sites to study the landscapes in which they stand. A 'representative sample' of these projects (Iacovou 2004a) underlines the diversity of the field of archaeological survey. All the projects are concerned with settlement, but their temporal and spatial extent, the field methods employed to gather the relevant data, and the finer points of their research questions vary considerably.

Projects such as the Canadian Palaipaphos Survey Project (Sørensen and Rupp 1993 (Rupp 2004)), the Sydney Cyprus Survey Project (Given and Knapp 2003 (Knapp and Given 2004)), and the Troodos Archaeological and Environmental Survey Project (TAESP) (Given *et al.* 2002) have covered large areas of the landscape and gathered evidence of human activity from all periods of occupation. Others have focused on evidence from a particular period or from the immediate environs of a single site, in order to answer more specific questions concerning occupation and exploitation (e.g. Bolger *et al.* 2004; Lécuyer and Michaelides 2004; Webb and Frankel 2004). Some projects have lasted for decades (e.g. Bolger *et al.* 2004), whilst others have completed their work in a single season (Swiny 2004); some have surveyed intensively, relying heavily on counts and collections of surface material for their interpretation of the landscape, others have ranged more extensively recording sites, and at least one (Webb and Frankel 2004) has combined surface investigation with subsurface, geophysical survey techniques; and most, but not all, are directly associated with excavations.

With the exception of several years during the Vasilikos Valley survey (Todd 2004: 48) most projects rely upon at least one team of six or so fieldworkers – a necessity for intensive field methods. Swiny's (2004) small scale projects were limited by time – a single season in the field – and therefore the area they were able to cover, rather than by the number of people involved. That said, his surveys were amongst those with the fewest staff; most regional survey projects have favoured the deployment of several teams to maximise their coverage. Despite being unable to match the intensive methods of these larger endeavours several smaller projects have also employed systematic approaches to the landscape to make their own valuable contributions to the discipline (e.g. Ellis Burnet 2004; Gibson 2005).

Some of the projects selected by Iacovou (2004a) express an interest in the interaction between the sites that they record and others in the locality, the region or even outside Cyprus, but very few of them explicitly address the social aspects of the occupation of the landscape. So that whilst changing patterns of settlement are considered, as are the resulting communications and connections, land use and exploitation, SCSP's social landscapes (Knapp and Given 2004) are the closest that any of the discussions come to the concept of community. It was clear to me that there was scope to extend the study of settlement distribution and land use in Cyprus in order to incorporate discussions of the many levels of community that would have been present in the landscape.

I was certain from the very beginning of my Ph.D. that fieldwork would be an essential part of the process and the need for uniform data gathered from several areas of the island made it unrealistic for me to rely upon the data from any

current projects. It was therefore necessary for me to conceive of a project specifically tailored to my questions regarding the location and distribution of settlement and communities in historic Cyprus (Chapter 3). By combining the rigorously systematic elements of the larger projects with the flexibility of working alone I was able to build up my own body of primary data with which to assess, refine and extend existing opinions regarding settlement and community, and make a useful contribution to the existing corpus of landscape archaeological studies in Cyprus. After a short season in 2002 during which I carried out

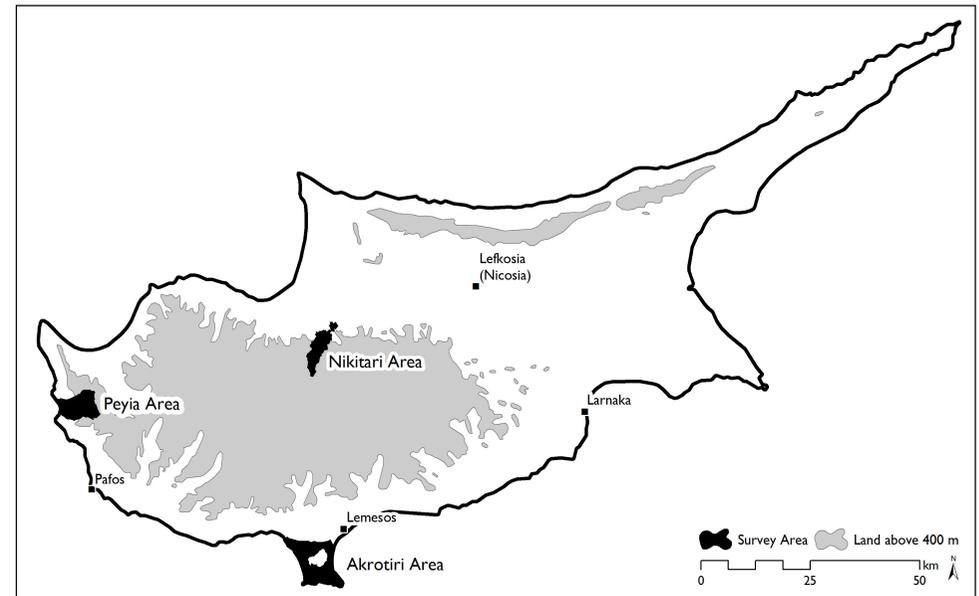


Figure 1.1 Cyprus showing location of survey areas.

preliminary reconnaissance and identified three survey areas (Figure 1.1), the bulk of the fieldwork took place during 2003 when I systematically surveyed 78 grid squares and recorded 98 incidences of settlement evidence in and around them.

Data from all periods were collected during the survey but, as mentioned above, I focused my analysis on the 4th to 19th centuries A.D., which span the Late Roman, Byzantine, medieval and Ottoman periods. Whilst nothing was ignored, evidence falling outside my time span is not discussed in great detail. The whole data set will be available for study from the Archaeological Data Service (<http://ads.ahds.ac.uk>), where it will be deposited on completion of the project. In the discussion the broad span is generally divided into three periods. The Roman period is assumed to run from the 1st century to 650 A.D. The Medieval period, starting in the 12th century is taken to end in 1571. Finally, the Ottoman period ran from the end of the 16th century to the arrival of the British in 1878.

There is a problematic gap in the data I recovered. Despite the presence of the late Byzantine church of Panayia Phorviotissa (Stylianou and Stylianou 1985: 117), near the centre of the Nikitari survey area, and the historical evidence for a Byzantine stronghold at Kolossi (Hill 1940: 318), just north of the Akrotiri area, there was no clear archaeological evidence for activity during the Byzantine period. The gap is even more evident in the TAESP data set due to their systematic, intensive collection and identification of pottery; indeed, the problem has dogged archaeologists in Cyprus for years (Gregory 2003; Rautman 1998; Rupp 1986). It is inconceivable that the gap in evidence was caused by a 500-year abandonment of the landscape; a more likely explanation is that Byzantine

pottery is, thus far, indistinguishable from that produced during the Late Roman period. Alternatively, and probably additionally, it is possible that during the Byzantine period vessels and containers were made from more perishable materials like wood, leather, metal, and plant-products such as gourds (Vroom 1998). It also seems that new subsistence patterns developed by a population depleted by disease, famine and the like were simply more ephemeral during a time for which even historical evidence is sparse (Cameron 1996: 41; McClennan and Rautman 1995; Purcell 1969: 105-160).

Much has been made of the impact of Arab raids on Cyprus between the 7th and 10th centuries (Dikigoropoulos 1958; Dikigoropoulos 1978; Kyrris 1996: 176-202). They are often assumed to have been the sole reason for the movement of settlements away from the coast between the Roman and medieval periods. Accounts tend to concentrate on the destruction or capture of cities and strongholds and little is said of the mass of population that lived outside them beyond occasional reference to their taking refuge in the hills and mountains. There is no doubt that the Arab raids had a huge impact on Cyprus, but it seems likely that they were simply the most dramatic of several factors, including the different administrative strategies of the governing powers and changes in rules of land tenure, that caused this drastic shift in the distribution of settlement. Another external power, the Ottoman Empire, is often held responsible for the abandonment of the land, and so the desertion of villages, after their invasion of Cyprus in 1570. Grivaud's (1998) historical study of desertion between the 12th and 19th centuries, for which he employs a large amount of demographic and cartographic evidence as well as textual data, suggests that once again attacks

from outside were just one of many reasons for the changing patterns of settlement.

A clear sign that it is unsafe to attribute changes in settlement practices to a single cause is the effect that different governing powers appear to have had upon them on Cyprus. There were broad similarities between the government of the island under the Romans and the Ottomans (Gazioglu 1990; Karouzis 1977; Kyrris 1996), and yet patterns of settlement did not reflect this. During the late Roman period the governor of Cyprus was appointed by the Emperor, taxes were collected centrally and much of the land was worked by smallholders. Similarly under the Ottomans the island was governed by the Sultan's representative, taxation was centralised and there was a move back toward smallholder farmers. The pattern of settlement was, however, quite different; under the Ottomans they did not return to the largely dispersed form of the Roman period. Instead, the nucleated villages established during the medieval period, when feudal estates held sway and the workforce consisted largely of serfs, remained the most common form of settlement. These historical elements are seldom apparent in the material record, but by combining them with my archaeological data as well as with considerations of community it is possible to flesh out my interpretation of the occupied, working landscape and further discussion in all areas.

This thesis represents not just the results of three years of archaeology in the field, in the library and at the desk, but is also an experiment in presentation. The landscape orientation of the pages is intended to ease the process of assimilating the information on the page by presenting it in a form more naturally fitted to our field of vision. The rationale behind this is discussed at greater length in the

section 'Towards using this volume' amongst the front matter that precedes Chapter 1. That section also contains an assortment of notes on topics including the use of italics in the text, the transliteration of Greek words, and an explanation of the grid square heading format used in the data chapters, as well as a glossary of terms and time periods used in the thesis.

The main body of the thesis is presented in eight chapters. This chapter (Chapter 1) introduces my research with some initial thoughts on settlement, community and their place in the landscape, and establishes this project's place within the constantly developing field of archaeological survey in Cyprus. The discussion of settlement and community is expanded in Chapter 2 where I explore our expectations of the physical characteristics of settlement, their place in the landscape, their propensity to change and the relationship of human communities with the physical structures that they inhabit. The second part of Chapter 2 considers phenomenology, and whether its emphasis on the human experience makes it a useful approach to landscape archaeology and the study of settlement.

The techniques I used in the field are explained in Chapter 3; data sources that supplemented my fieldwork, including maps, historical work and the work of other archaeological projects, are discussed. I then illustrate the process by which I chose the location, size and shape of each of my survey areas before describing the survey and recording methods I used within them. This is followed by an explanation of the recording forms and other aspects of the paper record, and the digital archiving processes that helped me maintain control of a large body of data both in the field and later during analysis. I end Chapter 3 by discussing

matters pertaining to archaeological survey such as background confusion, surface visibility and the dating of evidence in the field.

Chapters 4, 5, and 6 contain a presentation and discussion of the data I collected in the Akrotiri, Nikitari and Peyia survey areas respectively. Taking a geographical approach to each area I present a personal perspective and a systematic, 21st century experience of the landscape. In each chapter I present a brief sketch of the survey area, which includes its location and extent, my motives for working there, a summary of previous archaeological work carried out nearby, and a brief description of the topography and vegetation. This is followed by a presentation of the data recorded in the survey area; each grid square is described in turn along with any associated settlement evidence, irrespective of period. In the second part of these chapters I approach the data in chronological order, in three broad time bands: Roman (1st century to 650 A.D.), Medieval (1191 to 1571), and Ottoman (1571 to 1878). Within each period I consider ideas of occupation, exploitation and experience in the survey area as a whole, as well as the interaction of individuals and communities one with another, and with the landscape about them. I then address broader themes relevant to all periods to avoid repetition between the specific sections.

Having dealt with each survey area separately I combine data from the three areas and from elsewhere in Cyprus to consider a broader view of the topic (Chapter 7). This discussion is divided into three general sections, the first of which considers the way in which practical, social, political and economic factors influenced patterns of settlement in Cyprus between the 4th and 19th centuries A.D. The relationship between settlement patterns and land use are discussed in

the second section, and the chapter ends with a closer look at the reasons behind the post-Roman coastal desertion usually attributed to Arab raiders. In Chapter 8 I summarise the significance of my results within the wider discipline of settlement studies and the possible avenues that they have opened up for future work.

Finally the CD accompanying this thesis contains the database I constructed for this project. Due to restrictions of space it was only possible to include a small number of full-sized photographs. The database was built in Microsoft Access 2000, and the disc should be loaded in the D:\ drive for the photograph links to work correctly.

2 Theoretical Approaches

Despite being so different from one another archaeological theory and data are quite inextricable (Johnson 1999: 2; 2004). Whether consciously applied or not, theory will inevitably colour the analysis and interpretation of archaeological data. Indeed, given the need to select and sample the locus for work, or the material recorded once work has commenced, it is impossible even to begin to gather data without some interpretation or theoretical bias (Hodder 1997: 692). We are all human, we are all subjective, and we all operate through one theory or another. Each different approach to any archaeological data is complementary to any others, as each offers a different view of a past that we can never hope to understand in its entirety (Hodder 1999: 12).

Barriers between the abstract and the material, between theory and data, or between settlement and community can obstruct comprehension of the whole and do not reflect the world – past or present – around us. Divisions between the two elements are, however, perceived and barriers tend to be built along them, which can be employed to break the multifaceted whole into more manageable portions. In this chapter I recognise the barriers and consider the theoretical aspects individually before they are reunited with my archaeological data for extended discussion.

First, there is the question of settlement, community and landscape – three central components of this work. I am not concerned with creating a typology of settlement in Cyprus; my data would not support such an attempt, and the exercise would, in any case, be of debatable value. Certainly different kinds of

settlements exist in different places throughout the island and this is interesting and important, but it is not my intention to develop a series of keys with which to identify them all. The idea of settlement can be reduced to a set of constituent parts for initial examination, but if we are to proceed beyond the naming of those parts then it is important for us to reassemble them into a useful, working whole.

The idea of settlement remains sterile unless we incorporate some discussion of community. Certainly settlement can exist without community; such a deserted shell would however, still contain traces of the communities that built, occupied or abandoned it. A community, on the other hand, is not necessarily tied down to a particular settlement, whether it be formed by short-term groupings of prospectors moving between mining camps in 19th century America (Douglass 1998), or the farmers of a Cypriot village moving to a seasonal settlement each year for the harvest. By taking a landscape view the archaeologist is in a better position to observe the two elements inextricably forged with the landscape in which they exist, and to consider them as a symbiotic whole.

Secondly, there is the question of the theoretical stance I have taken to interpret the data; my biases and assumptions will have come into play the moment I began collecting and recording them. Beginning with a discussion of experience in the landscape, and skirting the edges of phenomenology, I have settled upon a practical theory that grew out of the dialectic between my systematic and reflexive fieldwork, and the later, detailed analysis of the data gathered.

2.1 Settlement, Community and Landscape

There has been surprisingly little discussion of just what constitutes a settlement, either in settlement archaeology or in landscape studies, and yet settlement has always been an almost inevitable element of the human presence. It is such a universal concept that certain elements to be discussed below may apply to settlement of any time in any place and, as a result, the examples of settlement used in this chapter are taken from all periods of occupation across the whole Mediterranean region, and beyond.

Simply put, a settlement is a place where people have chosen to live. The variety of examples that fit such a broad definition is immeasurable, however, and each one is shaped by such a diverse set of social, temporal and geographic factors that the task of defining them is daunting (Ucko *et al.* 1972). The extent of any settlement and the manner in which its boundaries are defined have considerable bearing on how it is perceived by its occupants, and by those on the outside. A large settlement may be walled for defence or simply to establish it in the consciousness of local and visiting populations. The location of a settlement can be used in similar ways; a prominent point in the landscape may serve as a position of power from which to control the local populace, or a settlement may be hidden away. Considering landscape as a whole it is inevitable that we will encounter more than one settlement; at this point the question of individual location expands to take account of the relative positioning of settlements one to another, as well as to the surrounding landscape.

Having established a series of constant, concrete elements of settlement it is worthwhile introducing two that upset this impression of stability; physical

change within a settlement is as inevitable as the presence of inhabitants. By combining the possibility of people with the material structure of settlement we can begin to consider the role of community in a living, working landscape.

Perhaps the most compelling image of a settlement is of a collection of domestic, public and working buildings, sharing ‘communal facilities’ such as chapels, springs, quarries or limekilns (Whitelaw 1991: 425). When we think of a settlement we think of a village, a town or a city.

Goodwin (1984: 20), however, merely considers it to be a place where at least three households have been grouped closely together over an extended period of time. Grivaud’s (1998: 37-48) discussion of the terms that have been used to describe different kinds of hamlets, villages and estates in Cyprus since the Byzantine period, by contrast, is an indication of how complex and changeable the definition of a settlement can be.

Some degree of permanence is necessary for a site to be considered a settlement; temporary camps or resting places used by nomads, shepherds or other individuals engaged in a short-term activity such as herding or hunting do not qualify. It is unlikely that the pre-Neolithic site of Akrotiri *Aetokremnos* on the south coast of Cyprus was a permanent dwelling place, but the butchered remains of over 120 pigmy hippopotami and the tools with which the work was carried out attest to considerable activity there around 10,000 years ago (Simmons 1999). The evidence from *Aetokremnos* indicates repeated occupation and activity; it became a permanent site, but does not constitute a settlement in itself.

Permanence alone does not define settlement: a single, permanent field shelter might indicate the presence of a nearby settlement, but could not itself be considered a settlement. But it must be a combination of its size and its seasonal use that prevent it from being a settlement, as villages that are only used seasonally, in order to facilitate the more effective exploitation of resources across a wider area, are considered worthy of the term. Kato Koutraphas *Mandres*, situated on the boundary between the sedimentary plain and the igneous foothills of Cyprus's Troodos mountains, is just such a village (Given 2000: 218; Ionas 1988: 20). Until about fifty years ago, the inhabitants of several other villages occupied it for two periods during the year — once to bring in the harvest and once to make cheese from the milk of their sheep and goats.

Settlement requires buildings to be associated with signs of production – agricultural, craft or industrial – and evidence of the various daily activities or practices that constitute living: sleeping, eating, cooking (Roberts 1996: 15-16). If occupation is not permanent there is some expectation that temporary occupants will arrive from another settlement solely to carry out a specific task such as harvesting, after which they will return to the first settlement.

Two of the most obvious attributes of any settlement are its size and its shape, or the way that it occupies space as defined by its boundaries. Boundaries are artificially imposed onto a landscape by its inhabitants (Ingold 1993: 156), and are often remembered or interpreted differently by different observers (Geertz 1980), but they are nevertheless an integral part of settlement and settlement patterns. External boundaries mark not only the extent of habitation areas but also the borders of a settlement's wider territory. Internal boundaries, on the other

hand, break a settlement into different administrative or imagined areas, along racial, social or task-specific lines for example. The settlement is unified by the enclosure of the external boundaries, and divided within them by the internal boundaries.

Territorial boundaries are seldom obvious in the archaeological record, they are the kind of division that is recorded on maps, and used by governing authorities to divide, control and administer a region (Given 2002a; Kain and Baingent 1992: xvii). They are often simply a bureaucratic manifestation of long-standing traditions that developed from perceptions of the landscape, and local agreements between its occupants. Cadastral plans produced by the British Colonial administrators in Cyprus in the early 20th century formalised village boundaries that had been accepted for generations. The British based them on unmapped, Ottoman lines, which were, in turn, founded on local tradition and land ownership.

An exterior boundary defining the main area of occupation can be easy to identify, whether it be the edge of a concentration of houses or a city wall. Where the boundary is not as definite as a wall, a settlement may extend beyond the structures at the centre; as a basic rule of thumb Roberts (1996: 25) suggests that structures within a 150 m hailing distance of one another can be considered to be in the same settlement. This could perhaps be extended to define the edges of a settlement, so that it is not just structures that are incorporated, but also the immediate environs. The *Mejelle* (the Ottoman law code) enshrined a similar idea, which reserved a zone, defined by hailing distance, around the village for

domestic plots and threshing floors, from which grazing animals were excluded (Mejelle 1901).

City walls, or their absence, tend to evoke terms such as ‘defended’ and ‘open’ settlement, with one assumed to oppose the other. Defended, with its connotations of warfare, is a loaded term and it should not immediately be assumed that a wall surrounding a settlement was for protection; in medieval France for example there were clear conflicts between the requirements of urban development and defence (Reyerson 2000: 88). Some strong walls were, indeed, primarily concerned with matters of defence; the 16th century walls around Famagusta and Nicosia, for example, were built by the Venetians in response to the expanding Ottoman Empire (Perbellini 1988). At Neolithic Jericho, on the other hand, defences that were once taken to have protected the city from human incursion have now been reinterpreted, and the tower is seen to have been a ceremonial site, whilst the great walls were flood defences (Herzog 1997: 20).

Whilst solid walls would indeed form an integral part of any city’s defences against human or natural forces, they could also be put to other, subtler uses associated with display, control and the demarcation of territory (Cavanagh 2004). In the 19th century the Hudson Bay Company built Fort Garry in southern Canada when there was no threat of competition or violence from rival companies or political factions. It established and maintained the company’s dominance in social and economic relations with its employees and settlers in the region by its position in the landscape, its solid presence and by limiting access to the interior of the fort (Monks 1992). More than a little display is evident in the eleven pentagonal bastions that make up the Venetian wall of Nicosia. They are

regularly built and regularly spaced, but the clean, abstract beauty of the exterior enclosed a cramped and irregular city, which hampered the organised and effective defence that the walls should have afforded, allowing the Turks to overcome it with relative ease in 1570 (Perbellini 1988).

Internal boundaries may be less obviously confrontational, but nevertheless they mark divisions of all kinds within a settlement, and may be indicated by a street or road, or by a concentration of similar shops or businesses. When Raffles laid out Singapore in 1819, the city was divided into different areas to house the distinct ethnic groups that lived there in areas defined by the street system (Hornby and Jones 1991: 58). Within the village boundary defined by the Mejelle’s (1901) hailing distance there were different areas for living, cultivation and the processing of grain. The precise boundary might not have been clear on the ground, but there was a definite division between the areas of land use.

Development in modern towns and cities is often limited to established plots defined by a much older street plan, thus preserving old, internal boundaries (Hornby and Jones 1991: 64). To some extent this is visible in the narrow streets of the old city of Nicosia, and is quite clear in the chequered, medieval grid of central Salisbury in Wiltshire. Town planning is not always as geometric as in Salisbury, in the Early Bronze Age village of Be’er Resism in Palestine the pattern was far less strict, and yet the planning was no less defined (Dever 1985). Three distinct clusters of structures were identified, each representing a different social level identified by similarities in the standard of construction of structures within each cluster.

The location of a settlement will have a significant affect on its shape and, by extension, its external boundaries; the extremities of some Bronze Age settlements in Cyprus, for example, were very clearly defined by the steep slopes of the plateaux on which they were built (Swiny 1981). Although it can be useful to divide the physical elements of settlement for an initial study, it should never be forgotten that they exist in combination and not in isolation. The study of a settlement's location without considering its position in the landscape in relationship to its other attributes, such as size or shape, would result in an incomplete image of it.

Discussions of what constitutes a rural settlement and what constitutes an urban settlement have produced such wide-ranging, and frequently changing, ideas, that distinguishing between the two is not as straightforward as it may at first seem. The primary indicators of rurality appear to be small, dispersed settlements primarily dependent upon agriculture (Alcock 1993: 33; Osborne 1987: 193), and Wilkinson (1999: 50) certainly equates urbanism in the Levant and Near East with a move in the opposite direction. Blouet (1972: 12) also assumes that as a settlement increases in size, so it moves from being rural to being urban. He sees a settlement hierarchy where villages are inevitably associated with rural life and towns with the urban, but the move from rural to urban is not a simple, linear, nor indeed inevitable process (Hall 1989: 14; MacKay 1994: 283).

The unavoidable interaction between town and country results in exceptions to any preconceived ideas of urban and rural. In Roman Italy for example small, urban centres with little or no resident population have been identified in otherwise rural settings, whilst at the same time 'agro-towns' provided habitation

for commuting agricultural workers (Lo Cascio 1999: 164), suggesting that neither size, setting, nor the dominant activity of a settlement's inhabitants are necessarily clear indicators of whether it is urban or rural. These exceptions to our preconceptions are perhaps useful in that they move us away from glib generalisations. Horden and Purcell (2000: 96) suggest that the 'urban variable', that essential feature of life in a town or a city that distinguishes it from life elsewhere, is not only all but impossible to define, but also very difficult to apply universally. It is perhaps more useful to accept and embrace the idea of a settlement existing within an urban/rural continuum, of the sort rejected by Cloke (1979), and to consider it in relation to other settlements, the landscape and to the time period under study (Horden and Purcell 2000: 93-94).

The location of a settlement reflects the constant interplay between its inhabitants and their landscape, as compromises are struck between a group's wants, needs and the local resources. The practicalities of topography do not always present a simple, single choice; land must be suitable for building and yet provide the necessary vantage point, minerals, fertile agricultural land, or water for consumption, irrigation or power. During the 13th century B.C. the acropolis at Pellana, in Laconia, was built on high, uncultivated land whilst below it a well-watered, fertile plain provided food for its citizens (Spyropoulos 1998). Many villages in Bronze Age Cyprus, on the other hand, were too small to warrant an acropolis and appear to have been far more integrated, with the houses separated by small gardens and orchards (Swiny 1981: 79).

Manufacturing settlements have demands upon their surroundings that go beyond mere subsistence; mining and metallurgy, for example, demand a location close

to a specific range of raw materials, as well as considerable supplies of fuel and water (Knapp *et al.* 2001). In addition to the initial location of a settlement, such industrial activities may have had an impact upon its layout, as well as the situation of other sites in the area. The archaeological record shows that dwellings were not built down-wind of, for example, mines or smelting furnaces (Barker *et al.* 1999: 262-269; Graham *et al.* 2001), whereas there are many examples of threshing floors being built tight in against the main agglomeration of houses as they are at Kato Koutraphas *Mandres* (James 2001) and Nikitari (Chapter 5), both on the southern edge of the Mesaoria in Cyprus.

The archaeological interpretation of such remains, however, demands some care; Knapp (2003) has shown that the presence of production does not necessarily imply residence and that many industrial sites do not include signs of habitation. Even agricultural activity does not necessarily imply permanent occupation (Osborne 1992: 22); Kato Koutraphas *Mandres*, for example, is known to have been a seasonal settlement (Given 2000: 218; Ionas 1988: 20; James 2001) and anecdotal evidence suggests that, initially, Nikitari was too. Nevertheless, the evidence of any permanent exploitation of resources must imply permanent settlement; those engaged in the exploitation must have lived somewhere even if, for whatever reason, it was not actually at the site of their work.

The practicalities of production are not the only elements to influence a settlement's location; defence or control of the surrounding territory may also be contributory factors. Both the Late Bronze Age Cypriot sites of Pyla *Kokkinokremos* (Karageorghis and Demas 1984), situated on a plateau above a plain, and Maa *Palaeokastro* (Karageorghis and Demas 1988), located on a

peninsula, arguably combined natural features with constructed fortifications to control access to the settlements and to the nearby sea. There is no clear evidence of a permanent water supply at either site, which does not sit easily with their defensive attribution (Karageorghis 2001); their function was, perhaps, more one of control without recourse to conflict.

The majority of a settlement's inhabitants, of course, would never have any input into its location; for the most part life continues without change and a minimum of disruption. Populations remain settled, developing emotional and historical ties of tradition with a particular place (Rowlands 1972: 453); they have no wish to move. Their settlement does not move.

Settlements can seldom, if ever, be said to exist in absolute isolation; at a very basic, physical level any two settlements have a relationship one with the other simply by existing in the same landscape, however large that landscape may be. The distribution of settlements is simply a perception of the combined location of each individual settlement within a group. Consequently the location and the distribution of settlements are affected by similar factors. By considering the location, extent and strategic significance of all the settlements within any group, it is possible to study their distribution and physical relationship one with another as well as with the landscape in which they stand. These straightforward, spatial relationships become far more complex when the inhabitants of the settlements are taken into consideration; even if there were no direct communication between two settlements, the inhabitants would have a relationship simply by being aware of each other's existence.

It can be tempting to represent settlements in a landscape as a scatter of dots across a map, but this is limiting and obscures the complexity of the individual elements as well as the multiple layers of interconnection between them. Even when dots of different sizes are employed to relate to economic or social rank there is little indication of the role of the individual settlements or their relationships. Equally, a temptation to view boundaries, particularly those immortalised on historical maps, as impermeable can lead to an impression of settlements as a series of discrete, yet contiguous elements that fit neatly together and fill the landscape. Both views can provide a useful overview of a region, but it is simplistic, if not erroneous, to divide the landscape into neat regional or functional packages (Horden and Purcell 2000: 103); the diversity of factors involved in any distribution makes it impossible to reduce settlements to the geometry and mathematics of dots, lines and polygons.

Like the distinction between urban and rural sites, the differentiation between nucleated and dispersed settlement distributions should not be approached with expectations of concrete absolutes (Knapp 1997: 24; Roberts 1996: 24). The distinction should always be qualified either by 'form' or by 'pattern'. Form applies to the individual settlement; single, solitary farmsteads are dispersed, whereas a village, with its closer grouping of dwellings, is nucleated. Pattern refers to the distribution of the individual settlements within a particular system; a dispersed pattern would consist of well-separated settlements with no clear, common focus, although the individual elements could themselves be nucleated in form. A nucleated pattern is made up of a group of settlements of which one is dominant, serving as the focus of political, economic or social activities.

Ultimately all settlements are dispersed; it is simply a question of degree or scale. Nucleation of settlement on a local scale may be reflected by an apparent increase in dispersion on a regional scale, as the centres of population become more widely scattered at the same time as they increase in size. The dispersed settlement pattern of Late Neolithic Thessaly became more nucleated in the Early Bronze Age as larger, more permanent settlements were established, and then in the Late Bronze age marginal colonisation around the population centres effectively dispersed the increasing population (Halstead 1994: 200). Archaeological evidence can, however, be confusing; at first glance it might appear that prehistoric Melos in the Cyclades had a large population spread occupying numerous small settlements. It is more likely, given the likely occupation span of the sites and the length of the prehistoric period, that very few of the sites were contemporary. Instead, it would seem that until the advent of the first large, nucleated village at Phylakopi in the Middle Bronze Age, Melos supported a tiny, mobile, dispersed population (Bintliff *et al.* 1999: 141; Cherry 1979; 1982)

Change, whether instigated by human activity or by natural events, is inevitable. Subsistence practices may be changed to accommodate a climactic shift, or social and political relationships may be realigned by the ascendancy of one settlement over others in a region, or a dispersed settlement distribution may be replaced by a more nucleated, possibly defended configuration in response to an increased conflict or threat (Rowlands 1972). Change can be considered on a local scale, which would entail modification within a settlement, or on a wider scale as settlements appear and disappear, changing the distribution patterns of a whole region as they do so.

The movement of whole settlements can be seen in the Biferno Valley in Italy during the Neolithic period. Agriculture gained prominence over pastoralism and the variety of locations chosen for settlement decreased as there was less need to occupy the uplands of the valley (Barker 1995: 104). It can be difficult, however, to distinguish cause from effect; during the Early Bronze Age, the number of inhabited sites in the southern Argolid of Greece dropped dramatically from 28 to two, and erosion had stripped soil from previously worked land on hill slopes and the margins of the plain (Peltenburg 2000: 192). It is not clear, however, if the inhabitants abandoned a landscape rendered useless by their own activities or through natural causes, or if the land began to deteriorate once the farmers had moved away and ceased to manage it.

A settlement can change simply by shifting its centre of occupation; the resulting horizontal stratigraphy from one site can range in appearance from a concentrated, multi-period site to a number of dispersed single-period sites (Dewar and McBride 1992: 234, fig.1). Archaeological evidence at Episkopi *Phaneromeni* in Cyprus gave the impression of a single large Bronze Age settlement. Closer inspection, however, identified two, well-separated centres of occupation, one used during the Middle and one in the Late Bronze Age (Swiny 1981: 79). On a broader scale, the extensive but thin scatters of pottery on Melos, mentioned above, were probably the result of a sparse population, shifting to conserve the fertility of agricultural land, rather than a single, large, long-lasting, static settlement (Bintliff *et al.* 1999: 158).

It is often taken for granted that settlements follow a linear career path from isolated farmstead, through hamlet and village to town, and this is certainly often

the case. Growth tends to promote growth, favouring flourishing settlements to the detriment of smaller ones in the system that eventually disappear (Blouet 1972: 7). Whilst smaller settlements may fade and fail over time, this apparent survival of the fittest should not be taken for granted; the demise of the smaller settlements is not as inevitable or as frequent as much of the literature suggests (Zubrow and Robinson 1999: 144). Disappearance is not the inevitable result of a reduction in size. During the Early Bronze Age, the settlement at Manika covered an entire promontory and dominated Euboea; wider economic circumstances, however, forced the settlement to contract. It nevertheless remained viable, and the promontory was inhabited, apparently without interruption, well into the Late Bronze Age (Sampson 1986: 49; Simpson and Dickinson 1979: 226)

Despite this discussion of change the more usual state for a settlement is one of stasis, where it remains unchanged and unchanging for protracted periods; a settlement that sees no major change within a single human generation can be considered stable (Roberts 1996: 120). Even in a stable settlement, however, constant small-scale changes are possible, and large-scale changes of morphology or size in its past or its future are a certainty. The landscape around Pylos has been occupied for thousands of years and there is clear evidence of development and change, from the low level of settlement in the third millennium B.C., through major land-clearances around 2000 B.C. and a palatial enterprise in the 13th century B.C., right down to the present day (Davis *et al.* 1997: 483). During each of these phases settlements would have appeared stable, but from our vantage point in the 21st century we see the shifting, changing biography of the settlement and its society.

It is worth remembering that settlements do not necessarily disappear from the landscape or from the consciousness of the populace simply because they fail and are abandoned. Although their functions may change, these settlements continue as part of the landscape's development and human memory.

Settlements are essentially material things; they consist of buildings, cultivated plots, roads and such territory as they occupy. Community, on the other hand, goes beyond the buildings and incorporates the interaction, the unity and the diversity of those that inhabit them. Mr. Andreas, mayor of the Cypriot village of Tembria in 2001, said that his village lost half its heart when it lost its school. He was not referring to the physical building, which is still there, but to the institution; the community of a Greek Cypriot village, he suggested, is built upon the school and the church. Settlements come into being through the physical labour of humans, often those who live there, and when the humans are considered in conjunction with the material elements of the settlement it becomes the seat of a community, or communities.

Discussion of community has long been a part of anthropology and sociology (Cohen 1985: 21-38), but it is only within the last decade that archaeologists have given it the full attention that it deserves (Canuto and Yaeger 2000; Yaeger and Canuto 2000: 4). The intangible, sociological nature of community makes it a challenging field of study for the archaeologist depending upon material evidence (van Dommelen *et al.* 2005). There are several things that community is not; it is not the same as a settlement, it is not a measure of size, and it cannot be restricted to a finite space or place. It is not, strictly speaking, archaeological; when we talk of an archaeology of community, we enter a purely theoretical world of

conjecture, based upon the visible remains of settlement, worship, burial and the exploitation of the land. The nature of a community cannot be extrapolated directly from the form and function of the material evidence (Yaeger and Canuto 2000: 3). Remains of common public areas indicate a certain level of community, since in sharing an institution or facility a group of people are united in a community, such as the villagers that attend the same church or the same school.

Much archaeological debate has, hitherto, tended to focus on spatial definitions, so that the inhabitants of a village are identified as a community because their shared interests and experiences are based upon their occupation of a common settlement or territory (Gerritsen 2004: 144). Thus terms become confused and 'community' comes to imply 'settlement'. The terms are not, however, interchangeable. Communities are not immediately visible in the archaeological record; the remains of a settlement might indicate the focus of a past community, but it does not define the community. If it is difficult to draw a line on a map to define the precise extent of a settlement then it is impossible to do so for a community. Whilst they may be related to a place or space they cannot be defined by it. The community consists of the people and their relationships one with another and, in this example, with the place that they live.

Frankel and Webb (1999: 6) have sought to identify the physical extent of Early and Middle Bronze Age communities in Cyprus by plotting the decrease in density of particular pottery designs around a central concentration. The boundaries, however, do not mark the extent of the community. The presence of a particular design of pottery may indicate the presence of a community whose common bonds were expressed, in part, by its use. It may also indicate the extent

of the settlement on which that community was focused, but the pottery itself cannot indicate the extent of the community. The community would not lose its identity when it, or members of it, moved outside the area in which the pottery was found. Similarly the megalithic territorial markers discussed by Renfrew (1973; 1976) and Chapman (1981) indicate the presence of a community reacting with the landscape and with other communities, but they do not directly show the community itself. Discussions where the social group is an assumption based on a consideration of physical markers and the remains of the group's activity in the landscape, result in 'natural' communities, which are defined by the physical space in which they operated (Gerritsen 2004: 144-145).

Community, however, is a social construct (Cohen 1985) and a more flexible and useful idea than 'natural' communities is that of the 'imagined community,' which grows from a feeling of connection through a common cause or experience between people who do not necessarily know or meet each other (Anderson 1991). Thus the imagined community grows out of human relationships and is dependent upon the people that make it up, rather than the place in which they live (Isbell 2000: 248-250). In household archaeology, a longer standing field of study than the archaeology of community, the difference between the physical structure of the house and the social structure of the household is clearly recognised. So, for example, whilst a family house in the home village may be maintained the broad family that is united by their common bonds to it – the household – may be scattered across the region, the country or even the world (Gerritsen 2004: 141-143; van Dommelen *et al.* 2005). There are clear parallels between the house and a settlement, and the household and community. The

household is an imagined community, held together through social relations and the common feeling of belonging to a particular house, in a particular village.

If the household is seen as something other than a community then there is a danger of restricting both terms by endeavouring to force them into a scale of measurements. Community has been seen as falling somewhere between 'family' and 'larger scale social networks' (Kolb 1997: 266), or between 'household' and 'region' (Lightfoot *et al.* 1998: 206). The danger here is that community becomes a static, natural community tied irrevocably to a specific house, village or region (Isbell 2000: 245; Kolb and Snead 1997: 611). By retaining the flexibility of community and seeing it as the full scale rather than a point along the scale, it can be used effectively as a suffix with the preceding term giving some indication of size or extent – village-community or regional-community, for example. Household, of course, implicitly incorporates the sense of community and is a far more wieldy term than house-community.

Freed from a reliance upon place or physical structure, or questions of size, communities become more fluid and dynamic; a single community can occupy more than one settlement, just as a single settlement can be home to more than one community. Relationships and the relative status of individuals within a population shift in different social or working situations, and the communities they comprise change to reflect them; members of one community are not necessarily excluded from another.

Kolb's (1997) image of community is firmly in the 'natural' tradition, but his description of labour mobilisation on Hawai'i identifies at least three overlapping

'imagined' communities. He is concerned with three levels of construction project, for which there is ample archaeological evidence that is supplemented by ethnohistoric records. The construction ranges from small-scale domestic structures through communal utilities such as roads or agricultural terracing to large-scale field systems, fortifications or ceremonial buildings. Workers for different projects would be drawn from the larger population and would form a unique, task-specific 'imagined' community for the duration of the work. Similarly the population of the seasonal village of Kato Koutraphas *Mandres* on Cyprus (James 2001), which came together from at least four other villages, formed a variety of communities; a small community of shepherds was in residence for most of the year, but in the summer it became a predominantly agricultural community with most attention and effort based on the harvest. Each individual would have belonged to more than one community depending, amongst other things, upon their home village, their age, gender and task from season to season.

Imagined communities based on a task or occupation like these often leave archaeological traces across the landscape, far beyond the settlements with which they might be associated. The copper-smelting workshop at Politiko *Phorades* on Cyprus (Knapp 2003) is clear evidence of a mining and metal-working community. If the site was, indeed, operated seasonally (Knapp 2003: 569) then the individuals that assembled to form the metalworking community would have been part of another occupational community for the rest of the year. In all likelihood they would have formed part of a wider farming community in the area that would have provided support for them during the metalworking season when they would have been unable to produce food for themselves.

Whilst I have suggested that community cannot be defined by space or place, these two concepts are nevertheless important to our understanding of it. All communities operate within space and many are focused on a particular place or places like the metalworking community at Politiko *Phorades* (Knapp 2003), or the Hawai'ian builders (Kolb 1997). The relationship is dynamic and reciprocal, as communities order and shape the landscape, so those changes take on significance and places within the landscape begin to affect the daily life of its inhabitants. So the 6th-3rd century B.C. Pantanello cemetery in the Metapontum hinterland in Basilicata, Italy provided cohesion to a community made up of the population that occupied dispersed farmsteads and worked the surrounding land. As the cemetery grew and lined the roads with graves organised in family plots so it reflected past and continuing relationships of the living and their ancestors with the landscape around them (van Dommelen *et al.* 2005).

The interactive relationship between communities and their surroundings can also become apparent at a more compact, settlement level if material is taken to indicate human habit, social interaction and spheres of influence rather than space and activity. The men and women of Fort Ross, California (Lightfoot *et al.* 1998) came from different ethnic backgrounds, which were clear in the archaeological evidence recovered at the 19th century settlement. At a village scale the Native Alaskan men's background dictated the spatial pattern of the settlement where the arrangement of the houses along the beach reflected their prime activity of sea-mammal hunting. Within the house the Native Californian women's customs held sway and were evident in the cooking vessels, grinding stones and refuse disposal patterns that were found in and around the settlement. There is also clear nesting and interaction of communities in this instance; the

separate imagined communities of the Alaskan men and of the Californian women reacted to one another, as well as to their surroundings, and fused by interethnic marriages to create a third community that displayed innovative, hybrid characteristics manifest in the use of new raw materials, the exploitation of different food resources and changes in refuse disposal practices. This example underlines the fact that there is no direct equation between ‘community’ and ‘site’, but shows how the social process of community can be inferred from the spatial clusters of material evidence (Yaeger and Canuto 2000: 9).

The infinite variety of settlement forms renders futile any attempt at more than the most fundamental categorisation. Equally the interdependent facets that go to make up a settlement and its associated communities make it all but impossible to separate them in order to make any such categorisation. It is far better to be aware of the broad characteristics that exist, and of their varied constituent parts, and to use them in the study of settlement within our chosen region, further informed by the temporal and geographic context of each individual settlement or community (Horden and Purcell 2000). It is far more appropriate to approach any landscape and its constituent settlements with an informed and open mind than to endeavour to force it into a set of preconceived criteria.

2.2 Experiencing a Landscape, Experiencing the Past

Everyone experiences a landscape simply by standing in it or passing through it; it is the everyday arena with which humanity interacts as it goes about its business. How a landscape is experienced depends largely upon who is doing the experiencing and what is occupying them at the time: archaeologist or laity,

foreigner or local, living, working, studying, recording. Or any combination of these.

Many Cypriot villagers remember their grandparents talking of a time when deserted settlements in the landscape around their modern village were used or even permanently occupied; they experience a landscape that holds the traces of an identifiable, nameable past. Where the past is more remote, and a direct, personal link cannot be made, there can be a notion of making connection with something more universal; a sense of all-embracing identity that incorporates archaeological remains into contemporary life. There are accounts from the 19th century that describe villagers making offerings at certain ancient, perforated monoliths in southwest Cyprus that were attributed with healing powers by the sick and the childless (di Cesnola 1877; Ohnefalsch-Richter 1893). These monoliths have, in the 20th century, been identified as the remains of olive presses (Hadjisavvas 1993). Here strange objects in the landscape were given a use and a sacred purpose that rationalised them in the contemporary landscape.

Landscape can, of course be significant without being sacred; places of work, of trade, interaction or secular meeting are all as important to a society as the more-often discussed places of burial and ceremony. And not everything from antiquity is treated with solemnity; familiarity can breed, if not contempt, then a healthy, interactive and comfortable attitude toward archaeological elements in the landscape. At Avebury in Wiltshire, for example, where the modern village overlies something like a quarter of the main ditch monument, I have seen local children using two stones in the Great Circle as goalposts in a game of football.

Whilst the landscape is experienced by all, not everyone presents their experience for scrutiny by others; this is the province of academics, writers and artists. Consciously or not any presentation of a landscape is the result of a study, whether it be the memoirs of foreigners such as Durrell (1957) and Thubron (1975); Loizos' (1981; 2003) anthropological study of a single village; the fictional work of Neophytou (1997) – a Cypriot – or Pierides (1998) – a South African Cypriot; the final monograph of a regional survey project such as the Sydney Cyprus Survey Project (Given and Knapp 2003); or the work of a 20th century Cypriot painter such as Adamantios Diamantis (1994). Each author experienced the Cypriot landscape, each presents that experience in his own way, and each presentation has a different set of emphases, inclusions, exclusion, standards, standpoints, techniques and biases.

Theoretical approaches grow out of the formalisation and questioning of such emphases, inclusions, exclusion, standards, standpoints, techniques and biases (Johnson 1999: 6). The archaeological theory most often associated with attempts to understand people's experience and concepts of the world in the past is phenomenology (Tilley 1994: 11). The term has often been misused and abused, and much that would be seen as such is, in fact, far from phenomenological (Brophy 2001). In this section I show that whilst my experience of my subject landscapes inevitably influenced my recording of it and my interpretation of the data collected, they did not allow me to experience the landscape as anyone other than myself; and certainly not as someone might have experienced it in the past. As a result my approach, whilst drawing heavily upon experience, is not purely phenomenological.

A Phenomenological Approach

It is not my intention to rehearse a detailed history of the evolution of phenomenology from its philosophical roots to its acceptance – or at least tolerance – within the archaeological community. That has been done elsewhere and in admirable detail (e.g. Brophy 2001; Thomas 1996; Tilley 1994; Tilley and Bennett 2004). Instead I will consider the compatibility of phenomenology with the experience and presentation of archaeological survey.

Critics of phenomenology often consider that Heidegger's association with National Socialism in 1930s Germany render his ideas unacceptable. This is short sighted, as Heidegger was not the only advocate of phenomenology, and specific objections to him are dealt with reasonably by Thomas (1996: 2-8). Thomas' assertion that we should approach Heidegger's ideas with the clear knowledge that some of them are flawed, and assess their strengths or weaknesses as we use them, is one that we would do well to apply to any philosophical or theoretical stance.

Archaeologists looking to reinstate human experience into their archaeological data have seen phenomenology as an ideal approach to the relationship between people and the landscapes that they inhabit. By slightly different routes philosophers such as Heidegger and Merleau Ponty (Tilley 1994: 13-14), conceived of the human body as the privileged vantage point from which the world is viewed. This opened up a way for archaeologists that were so inclined to perceive and understand the landscape of the past, by endeavouring to put themselves in the position of its inhabitants.

This last step, of course, is far from easy; simply viewing a landscape from the same physical point as someone else does not guarantee the same experience. People are different, whether they are separated by time, occupation or social background, and they have different expectations of a landscape as is clear from even a cursory glance at the work of the artists and writers mentioned above. Landscapes change over time; monuments fall out of use, or the land is exploited differently, or a road is driven through it. Factors such as these prevent archaeologists from having the same experience as their subjects, and explain why Tilley (1994) is unable to present a full interpretation of the Neolithic landscapes that he has experienced (Brück 1998: 25-26; Smith 2003: 64-65). If the human element is considered important to a greater understanding of the past, however, it is hardly constructive to strive toward an idealistic objectivity by removing it during recording, only to try to reintroduce it at the interpretation stage (Andrews *et al.* 2000: 527). Whilst it is inconceivable that Tilley could have experienced the true meaning of the Dorset cursus, it is possible that he will have got closer, by appreciating the human element through a phenomenological approach, than someone with, say, a theodolite and a more Cartesian view.

Another criticism of phenomenology, or rather of those that espouse it, is their tendency toward relativism; they stress the importance of experience, description and subjectivity over detachment, measurement and objectivity (Brophy 2001). This, however, is largely due to an abuse of the terminology, rather than a fault of the theory; it would be easy for any of us to describe our impressions of an archaeological site and call it phenomenology, but without supporting data such presentations must drift into the realm of memoir such as Durrell's (1957) or Thubron's (1975). Or perhaps further still into fiction. Intuition is often sneered

at as an interpretative tool (Praetzelis 1998) and it is all too easy to label phenomenologists as stone-huggers simply because they allow their interpretation of a site to go beyond simple, and easily understood, measurements and cataloguing. A common misconception is that subjectivity replaces objectivity in phenomenology, but in fact, used correctly it should complement the objective and expand the archaeologist's final conclusions. Bender *et al.*'s (1997) work on Bodmin Moor was firmly rooted in traditional archaeological methods, if not necessarily traditional archaeological attitudes; they looked out from their site toward the landscape, and across the site at themselves in an effort to understand the experience of living at Leskernick in the past. They considered the landscape in which the site now sits, and their experience of working in it, and integrated these experiences with the raw data collected through excavation and survey. The resulting report is far from being a solely descriptive piece about their time on Bodmin; and Johnson (1999: 185) is not the only person to give a ringing endorsement to the level and quality of data in Tilley's work here and elsewhere.

Given that phenomenology addresses the relationships between a landscape and its inhabitants, the broad, physical range of a regional survey project would seem to make it the ideal approach to such a study. Upon closer consideration, however, it is clear that archaeological survey is not the perfect solution it might at first appear to be. It is true that a survey will cover far more surface area than an excavation. It is also true that, in the very narrowest sense, excavators spend their time with their noses to the ground, focused on relatively small areas, whilst survey archaeologists pass their days walking through the landscape that they study. Few excavators working today, however, would spend any time on a

particular site without considering its position, socially and economically as well as physically, in the wider landscape. If excavators are seen to be focused on a small piece of ground it is worth remembering that many survey projects rely upon counts and collections of artefacts, brought back by field teams who have spent their working day moving along narrow transects or confined to clearly defined squares or circles. Yes, survey archaeologists range further afield than excavators, but this does not automatically mean that they are any more aware of their surroundings than are their colleagues in the trench. Bender *et al.* (1997) highlight some of the perceived and actual differences and similarities between survey and excavation in the report on their work on Bodmin Moor.

On the one hand, one of the problems in accepting qualitative data as valid is the idea that it is inevitably tainted by subjectivity. On the other hand, by the time quantitative data have been collected, recorded, removed from the field, digitised, manipulated and analysed they are no longer the bastions of objectivity that we often like to imagine. Perhaps by accepting the failings of objectivity it becomes easier to recognise the value of subjectivity. Qualitative data have untold potential and, despite the caution with which such a variable resource should be approached, the democracy of its recording is something to be wholeheartedly embraced. The gathering and recording of something as intangible as experience is not easy, and in most cases it is the province of notebooks, diaries, the oft-ignored comments box on a recording form or, in some cases, video and tape recordings (e.g. Hodder 2000). Each individual has a unique experience of the landscape as they work in it, but they cannot all be recorded, still less included into any presentation of the work.

Perhaps this is why phenomenological presentations are often the experience of one person in the here and now, being used to interpret the experience of the many in the there and then – as with Tilley's (1994) and later Brophy's (1998) exploration of cursus monuments. The archaeologist's experiences in the field may begin to offer some physical insights into the past, but to incorporate those experiences into a complete understanding of the past is fraught with difficulty. This task would be still more daunting a prospect on a large project, where the widest ranging, day to day experiences are those of the field workers, whilst most of the final interpretation and presentation is made by a few individuals – team leaders, specialists and, finally, the project directors. Multiple viewpoints are as valuable at project-level as they are to the discipline as a whole, but it is almost impossible to maintain them into the presentation and publication of a project's work (Hamilton 1999: 3). The authorial or editorial voice spans a final presentation and gives it coherence, but in the same stroke reduces the visibility of the many individuals that contributed toward it.

The combination of qualitative and quantitative data is problematic, but not impossible. SCSP acknowledges its workers in the landscape, giving them brief voice in a selection of entries from field notebooks (Given and Knapp 2003: 4-5). These illuminate the experience of workers in the field, although not necessarily their direct experience of the landscape. Also, there is no suggestion that other notebook entries were incorporated in the interpretation and analysis of the more quantitative data that were collected. Elsewhere, in the prologue (Given and Knapp 2003: xx-xxvi), the integration is far more extreme as experiences of the present and imagined experience of the past are woven tightly together with methodological description and a modicum of quantitative data. The SCSP

monograph makes no claims to be a phenomenological interpretation of the landscape, but this fictional section, and Rautman's 'poetic construct' of Kopetra (Rautman 2003: 235-236), show that even amongst the strictest regime of sherd counts and GIS distribution maps, trench plans and artefact drawings experience is inevitable and inseparable from the data.

Bender *et al.* (1997) are more generous with their field notes; their integration is more complete and the report is peppered with paragraphs of italicised extracts. It is not clear who wrote the quoted notebook entries; the first three are initialled, and appear to be the work of the three authors of the article – multiple viewpoints, perhaps, but still from a very definite authorial position. The experience of the workers is separated from the data, and a reader is at liberty to choose how much, or how little, experience to include in their reading. However, the main text often shows signs of the thought process behind a description, which remind the reader that even the hardest of data are subject to interpretation. Close attention to the detail of notebooks and narrative records can provide the depth and colour necessary to transform a straightforward analysis of numbers into a multifaceted and, dare I say, evocative description of a landscape past and present without losing sight of the reality of archaeology.

My Experience, My Presentation

Much archaeology is experienced at second hand, through the written work of those who studied it at first hand. And so the layers of interpretation build up at each step away from the original. As archaeologists we may hope to communicate our findings and ideas clearly and honestly to others, but standards of clarity and communication are even more subjective and personal than our

choice of theory or our treatment of data. Integrating the experience of fieldwork into the presentation of data, or at least presenting them together, adds a dimension to our interpretations that will bring readers closer to understanding the subject landscape (Tilley and Bennett 2004: 26-29). It cannot provide a comprehensive insight into the past, but might highlight surviving elements of the landscape that affect the archaeologist's work in the present as well as having had an impact upon life in the past. An insight into the archaeologist's experience can also serve to comment upon their methods and give the reader another angle with which to understand their collection and interpretation of data.

An experience of the landscape is dependent upon the approach taken to it; in archaeological terms that approach becomes obvious in the field methods employed. Data are collected through a cloud of theory made up from approaches to fieldwork, just as much as they are viewed through a cloud of theory at the interpretation stage (Johnson 1999: 102). To understand my experience of my landscape, it is therefore necessary, briefly, to pre-empt the next chapter and discuss some points of my own approach to fieldwork and data recording.

When I began my fieldwork I did not intend to produce a phenomenological critique of the landscapes in which I had worked, and it is not something that can easily be tacked on to a set of quantitative data as an afterthought. The phenomenological approach has to be a conscious element of the data collection process. I was concerned with collecting data associated with settlement, its distribution, chronology and material culture, and only came to appreciate how important my experience of the landscape was, as my fieldwork progressed and the experiences built up.

Accepting that all data are biased (Johnson 1999: 175), but nevertheless convinced that it is the backbone of archaeological enquiry, I approached my work with the greatest of objective ideals and a set of specifically designed recording forms. As I had produced these forms myself and decided what should be recorded on them they were perhaps the first point at which subjectivity entered my data set. Further to this there was my choice of survey area; selected as thoughtfully as possible, to include a representative sample of the island, but a choice nevertheless. Despite this early subjectivity, I worked systematically through a series of randomly selected grid squares in the field, and methodically recorded the location of settlement evidence with a global positioning system (GPS), describing it on one paper form and noting any photographs taken of it on another. Having completed the day's fieldwork I switched on my computer to enter the haul of information into a database and geographical information system (GIS), and to store the digital photographs on my hard drive. Whilst not entirely quantitative these data were systematically gathered and uniformly recorded.

Running in tandem with the paper forms were field notebooks; I had initially planned to make only brief notes on ground conditions in each of the grid squares, but the narrative soon grew to be an important element of my data record. This large body of unformed notes – sometimes descriptive, sometimes numeric, sometimes completely irrelevant – was an important part of my experience and had to be incorporated into the final report. The grid square record entered into the database is taken from the notebooks, but does not seek to recount my time in the field, nor does it comprise the entire contents of the notebooks. Rather, it provides a summary of conditions on the ground, or

supplementary information on archaeological evidence, and sometimes my impressions or experience of a place. It contains the diverse, often qualitative, data that bind the individual elements of settlement evidence together, enabling them to be seen as a more cohesive whole than a disjointed scatter of dots on a map. The full text of the notebooks comes closer to recreating the often tedious, repetitive, muddled, routine experience of my time in the field, whilst the tattered, scrawled notebooks themselves come closer still to the actual experience.

The experience of the landscape is recreated at different levels; before presenting it in this thesis, I had to recreate it for myself, at home, as I assessed and analysed the data I had collected in the field. I had to sift through notes and records, to balance experience and measurement, and to blend the subjective and the objective in order to produce as full a picture as possible of my work and 'my' landscape. Computers deal in ones and zeros, and computer databases are most able to manipulate codified information. They are effective in working with lists of data with a known, limited set of possible entries; they fare less well with blocks of text such as I produced in my notebooks. The computer database would, at first glance, appear to be tied to a subjective approach to data collection and manipulation. In fact, during the analysis and interpretation process my database proved a vital unifying tool; with it I was able to display codified and narrative – quantitative and qualitative – data on the screen at the same time as photographs and drawings (Figure 2.1). During this phase of my work I was still able to present myself with as full a picture of the landscape as possible; my experience in the landscape was then vivid to me, and added to my recreation of it in my writing.

Settlement Evidence Record Form Close Grid Square Waypoints

Location/ID
 Survey Area: Topo Zone: Grid Square:
 SE Number:
 Name: Village: Locality:
 Easting: Northing: Elevation: metres Waypoints:
 Source: Topo Map: Cadastral Plan: Plot No.:

Description Sketches: Plan Elevation Other

Structures
 Number: Approximate Alignment: Preservation:
 Dimensions:
 Building Techniques:
 Boundaries:
 Material Culture: None
 Pottery:

Original Photographs
 Photograph Number:
 Click to view photograph



Structure from above
GS002 SE0007

Click to view drawing



Plan
GS002 SE0007

Figure 2.1 Screen shot of the database showing quantitative, narrative, photographic and drawn data combined on a single screen.

I came to know the areas I worked in; I was alone in each for at least a month, and became familiar with my surroundings by moving repeatedly around them by car and systematically through them on foot. It became easy for me to believe that I was inhabiting a particular landscape, but my experience was not that of a past inhabitant; it was not even the experience of a Cypriot living today, it was my experience. Despite a growing familiarity, my experience was not such that it could recreate the past, to

show me how the daily round of work and life used to be in my survey areas. I inhabited the landscape, but did so in isolation and on the whole as an outsider – and of course archaeologists, no matter how closely they may feel integrated into their subject, still have to overcome the exclusion of time.

I began this chapter with a consideration of the physical manifestations of settlement in the landscape. By discussing the myriad forms that a settlement might take, be it farmstead, village or city, I was able to establish the objective criteria on which this project was built. The potential of the dataset was improved by including boundaries and location in the discussion. Any data set collected with these points in mind would be able to reflect the size, extent and distribution of settlements and their territories across a landscape. It would, however, remain a flat, static picture; and studying the changing distributions of settlement would only result in a series of flat, static pictures.

To advance the interpretation of the landscape it is necessary to ask 'Why?' In so doing we begin our move away from the objective, because to answer the question we must address the inhabitants of the settlements and not just the empty material remains. Community and experience are both intangible but, equally, both inextricable from the human presence in the landscape. Elements of community may well become apparent in the material data, but experience is far more elusive. The only way to approach

the experience of past populations is through our own experience in the landscape that we find. We have already established that the two experiences cannot be the same, but it is the best tool available.

So, by compiling a dataset in the landscape based on hard, quantitative and objective data I established a firm foundation on which to base my interpretation of settlement in Cyprus. During the process I was able to inform my interpretations by taking into account my experience of the landscape without ever suggesting that mine was the experience of, for example, a medieval shepherd or farmer. By accepting, even embracing my subjectivity whilst not losing sight of the objective ideals of investigation, I was able to recognise data and experience as equal partners in the archaeological process. It is possible that this added a dimension to my data that resulted in the presentation of a landscape that is clearly of the real world, and not a purely academic one made up from flat lists and static maps. It may also be that it will make it easier for a reader to understand my observations, my findings, and the context in which they belong.

3 Data Sources, Field Methods and Recording Techniques

Any archaeological investigation consists of a succession of interdependent decisions and consequences; the outcome of one step will dictate the nature of the next, which in turn will affect the one that follows it. The value and acceptability of any archaeological results are completely reliant upon every decision that led to them, from the choice of research questions to the methods selected to answer them and the format in which their answers are presented. My own research interests focus upon the location of individual settlements and any changes that occur to them over time. From this starting point I can consider their relationships within wider patterns of distribution across the landscape, and the fluid occupancy of communities within the concrete structure of settlement. One of the first decisions I made with regard to my Ph.D. was that I would seek to answer these research questions through my own primary data, and the immediate consequence of that decision was that I was committed to some degree of fieldwork. It was clear that I would need to develop a set of working practices appropriate to the situation in which I would be working, and the questions to which I was seeking answers (Hodder 2000).

The quality and quantity of the data that I could collect would be dictated by my field methods (Given and Knapp 2003: 7-12; Given *et al.* 1999; Mattingly 2000), which in turn would be restricted by the necessity of working alone. An archaeological survey was the most obvious way for me to gather data; I would never be able to produce the kind of pottery density maps that result from the work of large regional survey projects, but I would, hour for hour, be able to cover the ground more quickly than field teams of an intensive survey. An

extensive mono-survey allowed for large areas of ground to be covered, in topographically diverse parts of the island, and could be tailored specifically to take into account my strengths and weaknesses. The wide area covered, something over 200 km² in three distinct parts of the island, meant that I could identify individual settlements, before drawing back to consider questions of distribution, boundaries, community and communication across the landscape and my own experience within it.

3.1 Data Sources

The data gathered during my field survey was supplemented from other sources including such local information and oral traditions as I was able to glean from inhabitants of the survey areas, as well as printed sources such as historical maps, travellers' tales and reports of previous archaeological work in my three survey areas.

Perhaps the most obvious place to start collecting information regarding past occupation and settlement of an area is from its current inhabitants. Cypriot villagers, particularly the older ones, possess a wealth of knowledge of the landscape about them, which can add colour and depth to the more quantitative, empirical archaeological data collected in the field. It is, however, a source that should be approached with care; memory can be a fickle and feeble thing in all of us and, whether they do so deliberately or not, informants may not always give accurate accounts of the past. There is also the distinct possibility that locals may not be as enthusiastic as we are to find archaeological remains on their land. In

the Akrotiri area I spoke to several landholders and, whilst it is possible that their idea of what constitutes archaeology was considerably more grandiose than mine, they never knew of any on their land, it was always ‘over there’ – off their property. Such conversations were almost always limited in their complexity due to the language barrier; whilst my interlocutors often spoke better English than I did Greek, we seldom had enough common language to engage in any but the most basic of conversations.

Language is also a limiting factor when it comes to printed material, and beyond English and a little French I have had to rely on translated texts. The ‘Sources for the History of Cyprus’ series, edited by Wallace and Orphanides (e.g. Martin 1998), provides a wide variety of writing by visitors to the island from Antiquity through to the British colonial period. These accounts, and others like them, are often referred to as ‘travellers tales,’ which rather suggests that they are somehow inferior and only barely acceptable to the true academic. Certainly they were written by foreign visitors who were almost certainly privileged and came with any number of agendas and prejudices, but a similar accusation could be levelled at many archaeologists working in Cyprus today. Treated with care, and a similar level of caution as information from local informants, these tales can be a rich mine of information on an astonishing range of subjects; they are, after all, first hand accounts of life in Cyprus as it was lived within those landscapes and amongst those materials that we now study as archaeology.

Surviving administrative documents generated by the governing powers from the Late Roman to Ottoman periods are again only accessible to me in translation. And many from the Ottoman period, which are held in the north of the island, are

simply inaccessible. Some translations and compilations of censuses and agricultural production are available (e.g. Grivaud 1998; Papadopoulos 1965), however, and provide useful statistical data. Once more this is a source to be used with caution as many censuses excluded elements of the population, and some appear to have been little more than guesswork (Hill 1952: 31-36).

Many of the maps used in my research were, like the censuses, the product of the ruling authorities, whether that was the government of Cyprus or the British before them. A new edition of the 1:50,000 topographic maps was produced in 1999, but due to security restrictions this was only available for my Peyia survey area, for the other two I had to use the 1979 edition. The 1:5,000 topographic maps, some machine plots and some published maps, dated from the 1970s, and cadastral plans at the same scale were all produced in the 1920s with some revisions during the final quarter of the 20th century. With one or two exceptions, maps of Cyprus began being produced in the 16th century but these early examples tended to be small scale and very derivative of one another (Stylianou and Stylianou 1980). They were, however, useful on occasion to locate vanished settlements, albeit with no great accuracy. Detailed, accurate mapping of the island began around the middle of 19th century and one of the most useful was Kitchener’s (1882) 1 inch to the mile map of the island. It is probably worth noting at this point that the detail and reliability of maps improves with time, but historical maps are not alone in their inaccuracies; the 1:50,000 topographic map of the Nikitari area, in contradiction of the cadastral plan, printed some 50 years earlier, shows the church of Ayios Yeorgios at Nikitari *Mutallia*, approximately 500 m south of its actual location – a distance which, in the Asinou valley, renders it all but impossible to find.

In a constantly changing and developing land, maps provide, as do the travellers' tales, a subjective account of the terrain at the time of its creation. Settlements and roads fall out of use, and decay but seldom disappear completely; others grow in size or stature, or are newly created. Some are marked on maps, others are not, and the reality of those that do may not necessarily match their cartographic representation. Maps can never do more than present an approximation of what we find in the landscape when we visit it (Monmonier 1996); a settlement may be omitted from a map for reasons of scale, or the quality of a road may have decreased so that its classification on the map seems wildly optimistic when we try to drive down it on the ground. But, truly representative or not, maps allow us to study wider tracts of land than we could ever hope to cover on foot, and provide us with nuggets such as locality names, or the identity of structures that we may never discover in the field.

A final printed source of data for this project was the output of other archaeological projects – excavation and survey – that have worked in or near to the areas in which I carried out field survey in 2003; for example, James Last's (1954) survey of Akrotiri, the Dhrousha area survey (Baird 1984) and the Troodos Archaeological and Environmental Survey Project (TAESP) (Given 2001; Given *et al.* 2002). These three, amongst many others, provided background and additional information that supplemented my own data and enabled me to extend, by proxy, the coverage of my survey and so broaden my view of the whole landscape. Of course the data from other projects had to be incorporated with full consideration of the different collection methods employed; a team of five archaeologists carrying out intensive transect survey will produce a different set of results to a solo archaeologist working extensively,

or another group of archaeologists excavating in the same spot. It is not, for example, possible to compare the work carried out by TAESP in the Asinou valley directly with my own work in Nikitari, even though our survey areas overlapped.

3.2 Field Methods

Many of the initial ideas I had for this project grew out of my background in intensive regional survey with TAESP, and they had to be considerably modified to suit my extensive mono-survey. The survey and recording methods described below were conceived and developed during a two week preliminary season in 2002, and were implemented largely without adjustment in 2003. As the project progressed and I became more familiar with the strengths and weaknesses of my work, small adjustments were made to mapping techniques, recording methods and data storage routines. The descriptions below present my field methods in their final form, unless their development is particularly germane to the eventual situation.

Survey Areas

In order to consider wider regional patterns of settlement and community in Cyprus rather than describe the physical attributes of individual settlements, it was necessary for me to cover as wide an area of the island as was possible. To that end survey areas were defined in three regions of the island (Figure 3.1), which between them encompassed a wide range of landforms, giving an almost complete topographical cross section of the island. The range of representative topographies enabled me to consider the affect of landscape on settlement location and patterns.

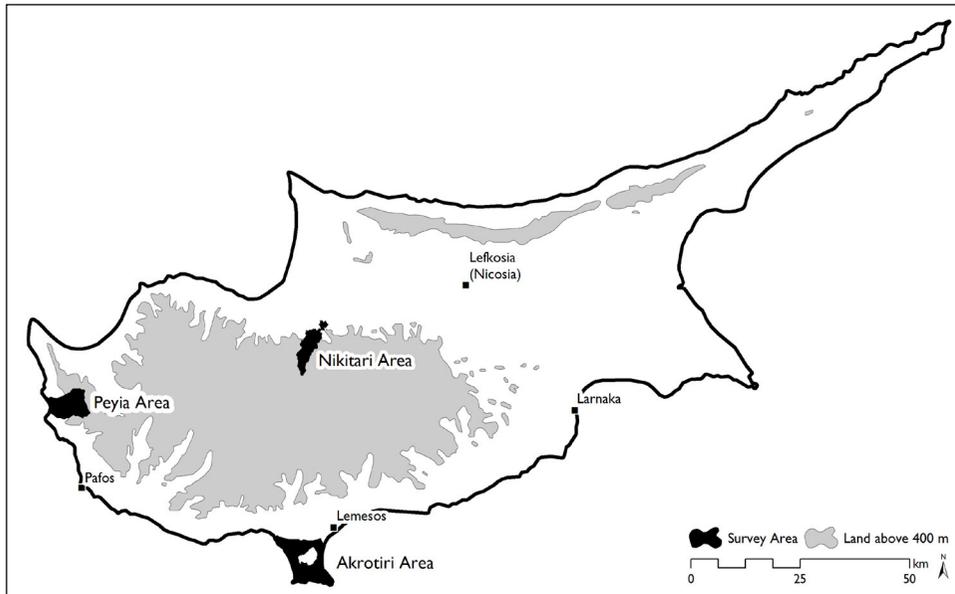


Figure 3.1 Cyprus showing location of survey areas.

The irregular boundaries to the survey areas were, in part, a consequence of wishing to incorporate varied topographies. The hilltops, rivers and coastlines defining the topographic zones dictated the path of an area's boundaries. Any survey area boundary is artificially imposed, but it was felt that the irregular lines following distinct topographical entities were more likely to reflect earlier, more sympathetic interactions with and uses of the landscape. To endeavour to identify a culturally bounded area prior to survey (Given and Knapp 2003: 25), as I did for my Nikitari survey area, seems rash and not a little deterministic; features

such as boundaries become obvious as we cross them and it is preferable, therefore, for our survey areas to cover parts of several culturally significant regions than to be restricted within just one. This is perhaps an argument for convenient, objective, geometric survey areas; my approach has been an attempt to compromise. I have followed irregular, usually natural, boundaries to define my survey areas, but within them worked in a strict geometric grid, which I did allow to spill over the boundaries of the survey area.

Having established ideal outlines for each survey area, I determined their final size by taking into account the time available to complete the fieldwork stage of the project. Assuming that I would be able to survey at the rate of one grid square per day, and that I would spend approximately one month surveying a 10% sample of each survey area, the mathematics produced three areas of 75 km² each.

Grid Squares – 500 x 500 m

Survey rate of 1 grid square per day

1 month field survey in each area = 90 days field survey

90 squares = 90 x 500 x 500 m = 22,500,000 m²

Total area surveyed = 22.5 km²

Assuming a 10% survey sample

Total survey area = 225 km²

Three survey areas of 75 km² each.

Having taken into account the realities and vagaries of local topography the situation was a little different, but stayed close to the original ideal.

Survey Area	km ²	Squares	%
Akrotiri	80	36	11.3
Nikitari	44	18	10.2
Peyia	60	24	10.0
Total	184	78	10.6

The final size and shape of each survey area is discussed below (Chapters 4, 5 and 6). Each was divided into broad topographic zones, and 10% of each of these was surveyed to ensure a stratified sample of the landscape. In Peyia and Nikitari the divisions were made at convenient contour heights above sea level. The Akrotiri area was too flat to be divided in this way and local conditions were such that no realistic divisions were identified and the whole survey area was treated as a single topographic zone.

Having made purposive choices in my selection of survey areas, it was important that my work within them should be entirely non-purposive and systematic. In order to have as broad a spread of randomly sited work as possible a matrix of 500 x 500 m squares, based on the UTM/WGS84 grid, was imposed across each survey area and a 20% sample of the squares in each area was selected using a number sequence generated at www.random.org. The top 10% of squares in each topographic zone were surveyed, with the second 10% held in reserve to replace any square that proved inaccessible or impractical on the ground. Any square overlapping the boundary of a survey area was considered to be part of it, thus immediately and inevitably distorting the natural, topographical outlines drawn

on the map. Where squares fell across two topographical zones they were assigned, for recording purposes, to the one that occupied most of it.

There were times when the inflexibility of the grid system proved frustrating, as must any systematically applied survey method; there were occasions when a slight realignment or spatial shift would have moved a square to a far more promising position. However, only in exceptional circumstances was a square abandoned and replaced by one from the top of the reserve list, which explains the presence of lorry parks, fields of cereal and precipitous gorges in the data set.

Survey Methods

The aim of my work was to identify settlement evidence on the ground and to record it *in situ*. Survey within the grid squares was necessarily extensive in nature; a lone archaeologist could not hope to cover a useful, intensive sample of the landscape without an unrealistic investment of time. Consequently my data set was skewed toward structures, extant features, and thicker concentrations of pottery, and probably toward more recent evidence. Whilst not invisible, lone artefacts or sparse scatters of material are much harder to record meaningfully with this kind of survey. The lack of minute focus was more than compensated for by the familiarity of place and accumulated experience, impressions of land use, topography and possible past activities that I built up by crossing and re-crossing relatively wide tracts of land, not only within the grid squares, but also as I travelled to and from the field each day. Even in squares where the surface cover appeared uniform, changes in the norm became apparent due to the repeated crossings of contiguous strips of land, whether those changes were in pottery coverage, land use or in the general, background monotony.

Each square was approached systematically and crossed ten times, north/south, at 50 m intervals, thus ensuring that any settlement evidence with a radius of 50 m or more would be crossed at least once within a square. Anything smaller would be detected if it lay on or near a pass line. The passes were not strict, limited survey transects, but a systematic approach to covering the 500 m² of ground, and reduced the temptation to investigate just the prominent features in a square. Evidence that did not lie on the line of a pass was not ignored; the basic unit of recording was the grid square, not the pass.

The task of remaining on-line was made easier by the ‘Go To Waypoint’ feature of the hand-held GPS (Global Positioning System), which alerted me to deviations caused by clumps of juniper, rows of vines intercepting my path, or a deceptive slope seducing me to its foot. By following the systematic route indicated by the GPS I did not necessarily move through the landscape by the most obvious, economic or established route. So, whilst I was experiencing the landscape that I was crossing, I was probably not doing so as a more conventional inhabitant might.

Passes were the favoured approach to a square, but on occasion cultivated plots and fields, or locked fences left small, irregular shaped pieces of ground available for survey. Such areas were covered freestyle, as closely in pattern and density to the 50 m passes as possible.

Despite the extremity of the landscape in much of the Nikitari area, it appeared from exploratory work in 2002, that the system of passes would work there as

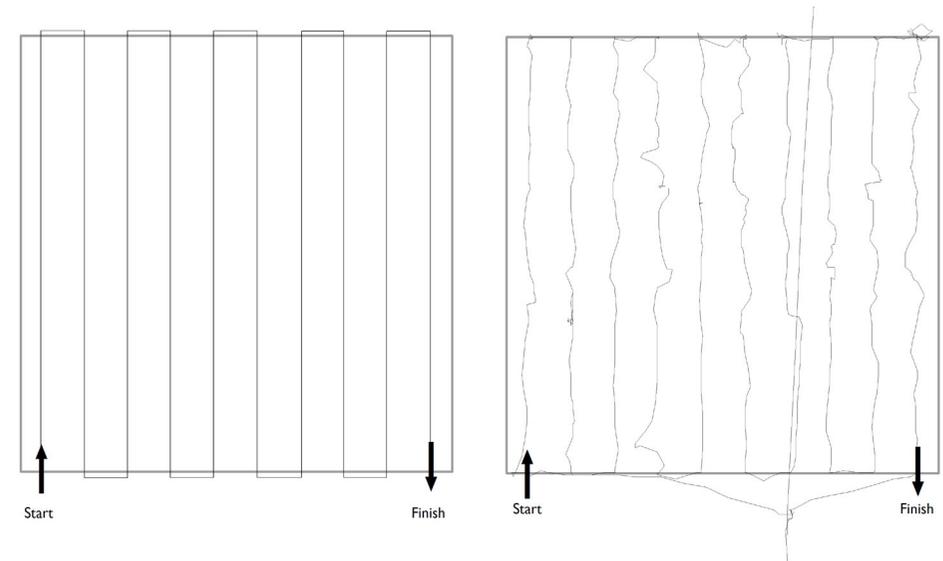


Figure 3.2 The ideal pattern of Grid Square passes at 50 m intervals, and the reality of the GPS track from GS039, a relatively flat square with few obstacles.

well. It soon became apparent during the field season in 2003, however, that this was not the case, and considerations of efficiency and safety forced a degree of stratification upon my survey effort (cf. Given and Knapp 2003: 25-26). The steep slopes of loose basalt and pine needles of the mountains, perhaps not surprisingly in retrospect, demanded a different approach than the broad, flat fields of the plains.

The Mountain Method that developed aimed to cover as much of a square as possible, with as near as possible, the same level of thoroughness that would be

achieved from 50 m passes. The mountains in the Nikitari area fall almost entirely within the boundary of the Adelphi Forest; this is state-owned land and the Forestry Department are enthusiastic road builders. It was possible to move about the mountain squares on forestry tracks and from these gain access to the many ridges and spurs along the side of the valley. By working down, along one flank of a spur and back up along the other it was possible to survey not only that spur, but also the one across the gully. In this way most slopes were observed twice, once from afar and once on the ground.

Much of the ground was obscured by a thick carpet of pine needles, further skewing the data away from occasional artefacts and toward structural remains. But, even with their intensive coverage, TAESP recorded very little pottery evidence in the mountain (Given 2003b; Given *et al.* 2002), and it seems unlikely that my dataset was unduly affected by this change in methods. It should, nevertheless, be approached in the full knowledge of the differences involved.

Two squares fell on built up areas in the Peyia area; passes were clearly not viable, but as the developments were small villages with a substantial number of historical elements a walkthrough survey was conducted. The two built up squares in the Akrotiri area – one a modern, developed and developing area, and the other on the runway at R.A.F. Akrotiri – were reassigned.

The majority of data were collected during systematic survey, but it is impossible to work within a systematic framework and ignore the landscape beyond it. Purposive and opportunistic survey, whilst occupying far less time than the systematic approach, gave me the leeway to record and incorporate extra data

into the record. Purposive survey allowed for the recording of points of particular interest first identified on maps or from others' work, or by word of mouth. Opportunistic survey, on the other hand, simply encompassed the recording of evidence within the survey area that I happened upon by chance, outwith a designated grid square.

3.3 The Data Record

Whether data were collected during systematic, purposive or opportunistic survey they were always recorded in the same, methodical manner. A complete record of evidence was kept on specifically designed paper forms, and was supplemented by notes and narrative in a notebook. Paper is still the most common form of field record (Mattingly 2000), and it is also the most economic and reliable; it is prey to none of the frailties exhibited by electronic, battery powered or processor driven equipment, which comprises an ever larger percentage of the field archaeologist's tool kit.

The written record was supplemented with digital photographs. The virtually non-existent running costs of digital photography meant that a far greater number of pictures could be taken than would have been the case with conventional film, which proved particularly useful for the identification, by experts, of pottery, worked stone and other artefacts that could not be removed from the field. The ease with which digital pictures can be manipulated has also meant that it was possible to produce more sophisticated images for inclusion in this thesis; multiple views of an artefact can be included in a single figure, as can composite pictures of a particular site or panoramic view.

All grid references were recorded using a hand-held GPS in the Universal Transverse Mercator projection against the WGS84 datum. Again, the convenience of the electronic tool meant that a far greater number of locations could be incorporated into the data set, albeit many were later discarded as, having served a purpose in the field, they were no longer relevant to the data. Each location or Waypoint was assigned a three-digit number by the GPS handset, to which I added a two-letter suffix. Initially the suffix was WP, standing for waypoint, but the three digits of the handset restricted this to a maximum of 999 values. Subsequently the second letter of the suffix progressed alphabetically after each 999 waypoints, so that the Waypoint numbers began at WP001 and ran through to WS851.

In the database each waypoint was assigned to a broad category to indicate the main reason that it was taken. This category was used to filter and organise the data in the GIS. Occasional conflicts occurred when, for example, a waypoint marked a river crossing a road; in such cases an arbitrary allocation was made.

Built	Usually a structure or the remains of structure.
Cultivated	Ground inaccessible due to cultivation or fences.
Forest Cairn	Location of forest boundary cairn.
Grid Square	Waypoint defining limits of grid square or pass line.
Material Culture	Location of material culture
Natural	Natural feature, topography.

Photograph	Location of subject or point from which a photograph was taken.
Road	Any thoroughfare – footpath, track or road.
Settlement Evidence	Waypoint taken at SERF.
Utility	A broad category incorporating built features such as retaining walls, check dams, wells etc.
Water	All rivers, streams, gorges and lakes, whether or not they were dry at the time.

The GPS was on the whole reliable, but was susceptible to the heavy tree cover of citrus groves in the Akrotiri area and the pines in Nikitari; the mountains too affected its accuracy in the Nikitari area. Due to varying satellite coverage throughout the day, the GPS was more responsive and offered greater accuracy in the morning, when it would, quickly settle on an accuracy of down to 4m. In the afternoon it generally took longer to lock onto a final reading, and an accuracy of 6 m was more usual.

The Notebook

The Grid Square Record, recording survey data at the Grid Square level, varied so much in length and content that a rigid recording form became impractical and unnecessary, and a notebook was used instead. A sketch map and some basic information were recorded uniformly, but further statements concerning ground and weather conditions, geomorphology and progress were added in a more narrative style. The notebooks were school mathematics books, printed with

5 mm grids rather than lines; these made sketching and mapping considerably easier without inhibiting note taking.

The bare essentials recorded for each square identified it within the project dataset and located it within the surveyed landscape, as well as noting when the work was carried out, and by whom.

- Grid Square Number – a three-digit identifier with the suffix GS. Starting at GS001 they ran sequentially throughout the project.
- Grid Reference of southwestern corner of the grid square.
- Survey Area in which grid square was located.
- Settlement Check Box to indicate presence of settlement evidence in the grid square.
- Personnel who worked in the square.

The sketch map in the notebook was primarily for use in the field (Figure 3.3). It developed as I worked and did not record the same level of detail for every grid square. Prior to work in a particular square, details such as roads and major landforms – gorges, coastlines and so forth – were transferred from the topographic maps and cadastral plans to the notebook. These helped me to plan my work in a square and aided with general navigation. Features of possible interest – kilns, water tanks, *mandres*, buildings and so forth – were also added to the map and, whenever possible, located on the ground. The identification of these was also an aid to navigation in the field, even if their recording could elicit accusations of purposive work within the systematic framework.

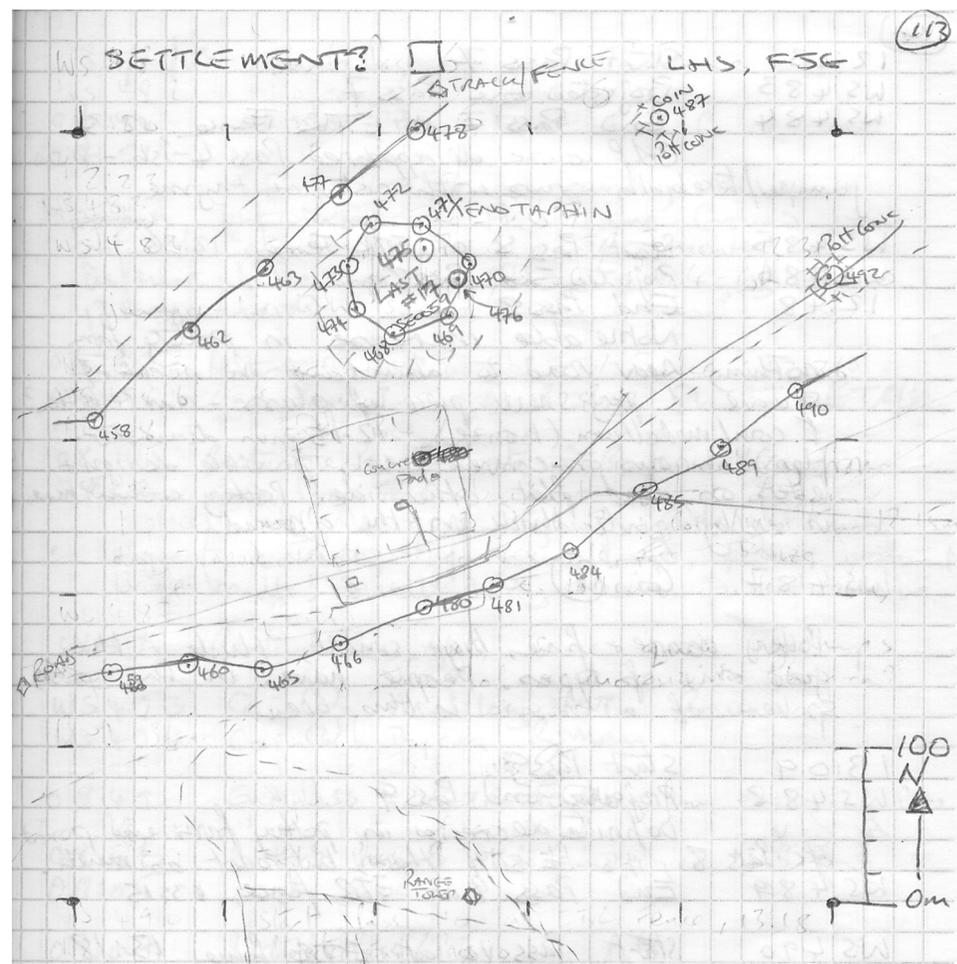


Figure 3.3 Sketch map from notebook (GS068).

It became clear very early on that one of the most important things to record on the sketch map was each pass as it was begun; in the heat of the day and the depths of the maquis, for example, it was all too easy to lose track of direction, progress across the square and even the number of the current pass. The actual pass-lines were often sketched in as part of the preparatory work and these were then labelled as each one was surveyed.

In the field any major natural or constructed features that affected or marked progress through the square were plotted with GPS and sketched on the map, as were elements of land use and features of interest. The GPS recorded waypoints to the nearest metre, but the sketch map at scale of 1:400 – each 5 x 5 mm square in the notebook was equivalent to 100 x 100 m on the ground – was a much more approximate affair.

In this way the sketch map built up a record of my progress across each square; by recording parts of the square that were not surveyed as well as what was found in those that were, it assembled a picture of current ground conditions and, to an extent, my experience of them. As well as keeping a watchful eye on my work in the field the sketch maps proved invaluable during the transfer, labelling and interpretation of the notes, records, waypoints and photographs accumulated in the field in the computer database and GIS.

Written entries in the notebook accumulated alongside the sketch map to provide a complementary representation of my progress through a square; the summary of conditions on the ground, archaeological evidence and my impressions of the experience were often disjointed, but usually comprehensive. Amongst the lists

of waypoint numbers and timings are notes on the weather, of dominant features in a square – the sea, a cliff, a gorge, rolling grassland, a radar mast, a smell – comments on my state of mind and body, on survey and recording methods, descriptions of archaeological features and plants, as well as encounters with animals and people, and occasionally irrelevant or tangential musings made whilst sitting on a rock, or sprawling in the generous shade of an olive tree, or hunched beneath my poncho in the rain. The notebook, much more than the ordered, considered grid square reports and settlement evidence records in Chapters 4, 5, and 6, is the real record of my time in each square.

The Forms

Two paper forms were used to record standardised data in the field that were later transferred to the computer database. The forms were printed on green paper, which limited experimentation had shown was much easier on the eyes than the more usual white forms. Under fierce sunlight they still seemed uncomfortably bright, but when compared to white forms or the field notebook, the benefit of green paperwork becomes apparent, and any small advantage that can be given to the fieldworker is worth embracing. Space for data-entry on the forms was deliberately limited (Coccia and Mattingly 1992; Mattingly 2000); the information recorded on them was intended, on the whole, for digital analysis and manipulation in the database and GIS. To this end the data had to be uniform and precise.

Settlement Evidence Record Form (SERF)

Each discrete incidence of settlement evidence located by systematic, purposive or opportunistic survey was recorded on a SERF (Figure 3.4) and given a unique

four-digit identifier with the suffix SE, beginning at SE0001 and running sequentially throughout the project. Extended descriptions of settlement evidence were recorded in the notebook. In some cases it became clear that features or structures, initially recorded only in the notebook, were important enough to be included into the SERF database, and these were assigned SE numbers during data entry after fieldwork, or during the collation of data after the field season.

The term *settlement evidence* was chosen, in preference to *settlement*, to allow a broader data set than would have been achieved had settlements been the only thing recorded. Many archaeological traces in the landscape are indications of permanent settlement in a region; field systems with shelters and terracing, mill buildings, churches and artefact scatters cannot be classified as settlements themselves, but they do indicate the likelihood of permanent occupation nearby.

They are evidence of settlement. The variety of ways in which settlement evidence occurred meant that not all the fields on the form, which were biased toward recording structural evidence, were used on every occasion. It was more efficient, however, to have a single, standard recording form than to have a different one for each possible kind of settlement evidence. Or, indeed, to have no forms at all.

In the first instance the location of each incidence of settlement evidence was recorded, within the project data set, on the UTM grid using GPS and on local topographic maps and cadastral plans. A brief description followed, which recorded dimensions, preservation and building techniques used in any structures. This description was usually accompanied by a sketched plan, elevation or map

Settlement Evidence Record Form – Sollars 2003

Location/ID
 Survey Area: N/A Topo. Zone: TZ1 Grid Square: GS002
 SE Number: SE 0007
 Name: _____ Village: KATO ARACHES Locality: APPIOURKA
 Easting: 489417 Northing: 3866552 Elevation: 102 metres
 Source: GPS 1:5,000 Waypoint Nos: WP067
 Topo. 1:5,000: 34-XX111 Cadastral: XXXIV - 47 Plot No: 162

Description STRUCTURE Sketches: Plan Elevation Other

Structures
 No: 1 approx. Alignment: NE/SW Preservation: E G P R
 Dimensions: 7 x 14m - see plan
 Building Tech: Worked stone corners, worked/rough stone walls, wood/mud roof, unworked door lintel.
 Boundaries: Rising ground to NE?

Material Culture None
 Pottery: Some, coarse (2002: 0# Mod. Photos)
 Tile: /
 Ground Stone: One or two poss.
 Chipped Stone: /
 Glass: Some, modern.
 Other: /
 Visibility: 10 % Background confusion: 0/ 2 3

Settlement Yes No Possibly Nearby ___ m

Morphology: /
 Type: / Form: /
 Dimensions: / m N/S / m E/W
 Inhabited: Yes No Seasonal

Environment
 Situation: Open, once cultivated land, view to sea (not from door) Aspect: W Slope: F M S E
 Geomorphology: Limestone bed rock showing through
 Vegetation: Thin grass, Asphodel, Carob, Dom. Ol., Terebinth +

Comments Notebook Entry Time: 25 min Juniper on rising ground behind.
 Rough stone jacket around W. walls - presumably more field clearance, of which there is a lot nearby.
 Visited + Photographed 2002

Data Source: Systematic Purposive Opportunistic Other People's Data
 Dates: Recorded: 17/4/03 Entered: 17/4/03 Audit: _____

Figure 3.4 Specimen SERF.

of the area and allowed some assessment of the types of settlement that still had traces in the landscape. No material was collected but an estimate of the density of several types of artefact was made and recorded along with comments about their types and quantities. The material culture recorded at a SERF, particularly the pottery, was my primary method of dating the evidence. The next section of the form was concerned with a description of any actual settlement, and was one of the less used areas of the form as very few settlements were encountered. Had it been fully employed it would have facilitated comparisons between settlement types, their locations and spatial relationships one with another. A description of the environment followed, recording broad geomorphological aspects of the SERF and its surroundings, as well as predominant types of vegetation in the area. These data were intended to aid in at least some reconstructions of the physical landscape during different occupations (Given and Knapp 2003: 29). The comments section allowed for a brief summary of the SERF and an indication of the type of survey during which it was found; if it was identified through other people's data, the information source was noted. The final entries noted the dates on which the SERF was recorded, entered into the database and when the database entry was audited against the paper form.

The form also had a field to note the time taken in recording the SERF; this field was not used uniformly enough to be of use in the final analysis – it was often forgotten until work in an area was almost complete. This is almost certainly due to the field's position on the form: a Start Time field at the top and an End Time field at the bottom of the form would probably have been more effective.

Ground Visibility and Background Confusion

Two fields associated with the material culture section of the form require a little more explanation; *Visibility* and *Background Confusion* are measures of two factors that affect likelihood of the archaeologist identifying or missing material evidence on the ground. They have been thought particularly important for surveys producing sherd counts and collecting material through intensive survey, and their affects incorporated into statistical analysis of field results to ensure a comparability of data across the whole survey area (Alcock and Cherry 2004; Given and Knapp 2003: 12, 54-56; Schon 2000; 2002). Some experimental work carried out by TAESP since my project suggests, however, that their impact may have been overestimated in the past (R. Schon p.com.).

Visibility is a measure of the percentage of ground visible through any ground cover that is present. Thick ground cover in the square probably reduced the likelihood of my finding isolated artefacts, and at its most extreme may even have obscured settlement evidence. At a SERF structural elements were less distinct amongst thick vegetation and any artefacts would be hidden completely, which had a considerable impact upon my ability to date any evidence. In the case of a quantitative survey, extremely bad surface visibility would probably lead to a survey unit being abandoned; as I was not counting pottery, and occasional finds did occur even in the worst conditions, areas were only abandoned when ground cover impeded progress as well as affecting ground visibility.

Good visibility was not a guarantee of abundant material finds; current land use had a large affect on it. Newly cleared fields where visibility was 100% were

often dug deeper than any previously cultivated levels and so were absolutely sterile. The broad strips of ground between well-spaced vines tended to be thickly covered with creeping plants unless they had been worked within the previous twelve months. Where ground was newly ploughed visibility approached 100%, but artefacts generally remained inconspicuous until the surface grime had been washed away by a convenient rain shower, or irrigation system. The best visibility seemed to be on land that had been cultivated and remained weed free over the winter. Under these conditions the ground was often covered in small stones interspersed with conspicuous sherds of pottery. Open forest brought its own visibility problems; whilst the vegetation was usually widely spaced, the ground was covered in a thick carpet of needles and pine bark flakes.

Pine bark had an uncanny knack of looking like sherds of fine, red pottery – mountain sigillata. This was background confusion. The Sydney Cyprus Survey Project (SCSP) developed an index that took into account the distortion of pottery counts caused by the confusion of natural objects that closely resemble anthropogenic material (Given and Knapp 2003: 54-56). TAESP adopted the index (Given *et al.* 2001), and both projects applied it exclusively to pottery counts. TAESP's graduations for background confusion, which I adopted, are a measure of how often you bend down to pick up a sherd only to find that it is a leaf or a stone, or anything but pottery.

- 0 Never
- 1 Occasionally
- 2 Frequently
- 3 All the time – so much so that you give up bending down



Figure 3.5 Background Confusion – Clockwise from bottom left: Stone wall built from and obscured by surface rubble; Two sherds and a stone; Naturally curved stone; Foam rubber. See also Figure 6.16.

Background confusion had less impact on my more extensive approach to material on the ground, and I did not record it consistently for every SERF or Grid Square. I did, however, extend it beyond pottery; there were several occasions where ruined structures stood amongst considerable quantities of loose

rock, either tumbled from a cliff face, or cleared from fields, or simply occurring naturally. In these cases there was often confusion between collapsed walls and further detritus on the ground, which may have affected my interpretation and recording of a site. One rather intangible example of it occurred in vineyards; early in the morning the low sun cast dappling shadows of vine leaves that broke up the outline of objects and made it all but impossible to identify anything on the ground. I took background confusion as an indication of the likelihood of settlement evidence showing up on the ground, not as a mathematical factor, but as a more general assessment of confusion.

Dating

I found a considerable quantity of pottery during my survey, and this was the primary means by which I could date activity in the landscape. Frustratingly I seldom found pottery in unequivocal association with extant structural remains, but there was, on occasion, sufficient in the immediate environs to attempt some estimate as to the age of settlement evidence. Nothing was collected during the survey and all material – pottery, stone, glass and coins – was dated by specialists working with TAESP, from the myriad photographs I took in the field. Clearly this was not entirely satisfactory as so much important detail is gleaned when specialists handle artefacts, but a sufficient proportion of material was dated for me to build chronological patterns of occupation within the survey areas.

Domestic olive trees are an omnipresent feature of the Cypriot landscape, and one or two particularly old specimens were recorded in close association with structural evidence. An estimate of their age, based upon the diameter of the trunk (Urwin 2003), gave some broad indications of when a structure or a site

might have been inhabited. Another natural chronological indicator was the lichen *Rhizocarpon tinei* (Noller and Locke 1998). Colonies only become established on stable surfaces, and it can be assumed that any stone on which it is found growing has been undisturbed for at least 150-200 years. The size of the colony gives an indication of how long a surface has remained undisturbed since the lichen became established. TAESP made a detailed survey of *Rhizocarpon tinei* at Asinou Monastery (TP117) and, particularly, on the church at Aspri (TP066) where it seemed that the construction and collapse of the building could be traced in the density of lichen rosettes (Noller p.com.).

With due caution a tentative chronology of structures may be suggested by reference to the cadastral plans, which were produced in the 1920s. Structures included on these maps tend to be labelled as sheepfolds or as ruins, or not labelled at all. It might be suggested then, that those that are unlabelled were still occupied at the time of the survey. Those labelled ‘sheepfold’ were probably in use as such, or at least had some association with sheep or goat herding within living memory. It is quite possible they were designated as sheepfolds simply because the locality name included *mandres*, as it is clear that some structures, particularly those in the mountains of the Nikitari area, were occupied by humans before, or if, they ever became sheepfolds. Structures labelled as ruins were presumably just that, serving no identifiable function when the maps were made. A further category are those remains identified during my survey, which are not marked on the cadastral plans, suggesting that they were so far decayed that they were not identified, or considered worthy of note, by the map-makers. So, working back in time we might tentatively consider the order: structures marked on the cadastral plan, but not labelled; structures labelled ‘sheepfold’; structures

labelled as ruins; structures that were not included on the cadastral plan. Additional clues can be gleaned from Kitchener's map (1882); it shows considerably less detail than the cadastral, but has the advantage of being at least 40 years older. Where Kitchener marks ruins, we can be sure that the settlement was well and truly abandoned before the arrival of the British.

Photograph Record Form and Virtual Films

One of the advantages of digital cameras is that they do not use films, but conventional films provide an automatic grouping for photographs, and a steadily accumulating collection of digital photographs could easily become unmanageable. In order to break up this bulk and to aid in the organisation of films, I grouped photographs together in virtual films. These virtual films were not of a fixed size, but generally contained between 35 and 40 frames – partly because this is a number familiar from the days of conventional film and partly because 40 records fit easily on a single Photograph Record Form. Virtual films were themed by subject; some contained all the photographs taken of a particular SERF, whilst others contained photographs of a single type of artefact, pottery for example.

Each photograph taken in the field was recorded on a Photograph Record Form. The form was completed in three stages. The digital camera automatically generated a frame number for each photograph and details of the picture were entered on the form in the field. Photographs were transferred from camera to computer each day; at this stage they were grouped into virtual films. The virtual film number and a frame number within it were assigned to each digital photograph and between them replaced the number generated by the camera. The

film and frame numbers were recorded on the paper form and the entire record entered into the computer database. Photographs were backed up to compact disc on a regular basis and finally the disc number on which a photograph was burned was recorded on the paper form, as well as in the computer database.

The film and frame number – three and two digits respectively – combined with the year in which it was taken, formed a unique identifier for each photograph. So that 2003-002-27 was frame 27 of film number 2 taken in 2003. Within the project file structure each virtual film became a sub-directory of the 'SollarsPhot' directory.

The Digital Record

A large amount of wide-ranging data was produced in the field and it was important that they were efficiently stored in order that the task of manipulating and interpreting them remained manageable. To this end all data collected in the field were transferred to a computer at the end of each day's work; recording forms, GPS waypoints, notebook narrative and digital photographs all formed part of the digital record. Even on a project as small as this one, it was essential that the transfer took place as promptly as possible, so that any problems or questions arising from the data could be addressed whilst the original work was still fresh in the mind (Mattingly 2000).

Most data were entered directly into a relational database that was constructed in Microsoft Access 2000 specifically for this project. Its appearance on the screen resembled, as closely as possible, the paper forms used in the field, because even though I had designed both, and collected the data, the resemblance made the

task of data entry far easier and decreased the likelihood of incorrect entries. By making the database less intimidating and easier to use the manipulation of data becomes more efficient, ultimately making them more accessible and available to other interested parties. A copy of the database and a small selection of photographs are included on the CD accompanying this thesis; a full, audited copy of the data archive will be deposited with the Archaeological Data Service (<http://ads.ahds.ac.uk>) on completion of the project.

Notebook entries were transcribed to Microsoft Word 2000 documents, in their entirety; slightly edited versions of this record were transferred to the grid square record in the database, thus giving easy access to a record of each square, which was not cluttered with lists of waypoints, timings and irrelevancies. Additional information or descriptions of photographs were transferred from the notebook to the photograph record in the database, which was linked to the images that had been transferred from camera to computer. Additional information provided by subject specialists was added to the photograph record when it became available so that it developed into a broader ranging record of material evidence, rather than simply an index of images.

Photographs were stored in their original form, with no manipulation. Some composite images were made to present artefacts more clearly or to present a particular piece of settlement evidence in a single frame, but original images remain in the archive. Composite images were also recorded in the database. Waypoints were downloaded from the GPS handset into the database, each was given its unique identifier and a description of the point that it marked was entered.

Microsoft Word and Access 2000 were selected for word processing and database construction due to the ubiquity that makes them almost, if not in fact, industry standards. Access 2000 has the additional advantage of being compatible with ESRI ArcGIS 8.3, the geographical information system (GIS) used on this project that is itself approaching the status of industry standard. By linking the database directly to the GIS I could produce maps of my survey results direct from the waypoints recorded by GPS, or by incorporating them with existing maps and data from other sources. Through this analysis I could clarify the distribution of data and filter my results in order to investigate particular distributions or trends in them. It is important to remember, however, that the software is a tool; it does not have the answers within itself and should not be allowed to affect the approaches taken to the data set or determine the results produced from it.

4 The Akrotiri Survey Area

The Akrotiri survey area was named for the Akrotiri peninsula, which protrudes from the southern coast of Cyprus. Almost all the survey area's 110 km² fell within the Western Sovereign Base Area (WSBA), and RAF Akrotiri comprised its southern third, access to which was arranged through the WSBA Administration.



The entire survey area lay below the 100 m contour and was neatly defined by the peninsula; it stretched as far north as the east/west road between Zakaki and the junction with the main Lemesos to Polis road. Until recently – in geological terms – the tip of the peninsula was an island off the south coast of Cyprus; as a consequence the arms of the peninsula, to either side of the salt lake, are relatively new land and consist largely of salt marsh and beach (Blue 1997: 35). It is not entirely clear when the land bridge was formed, but the western arm was almost certainly complete by the Roman period. Much discussion of the closure of the eastern arm is based on historical maps and travellers' accounts, which were doubtless affected by seasonal conditions, individual perceptions and the limitations of cartography at any given period (Heywood 1982; Simmons 1999; Stylianou and Stylianou 1980). Whilst Villamont (1908: 172) described a controlled channel between a fishery, presumably the lake, and the sea in the 16th

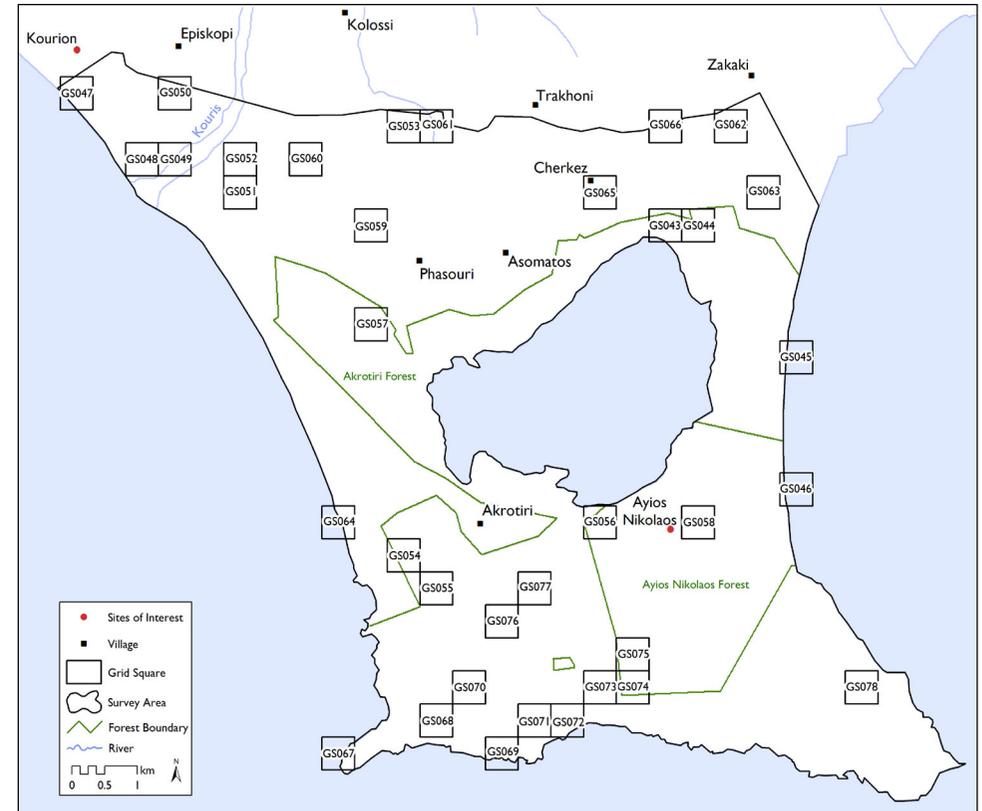


Figure 4.1 The Akrotiri Survey Area.

century, the maps reproduced by Stylianou and Stylianou (1980) seem to indicate that the eastern arm remained open until the middle of the 17th century, and that a channel continued to connect the lake to the sea until early in the 19th century.

The Akrotiri survey area was chosen to include the lower levels of the topographical cross-section of Cyprus; it offered a good deal of unexploited marginal land as well as intensively cultivated and developed areas. The location of the peninsula, at one of the extremes of the island, and its inhospitable nature was relevant to a study of settlement location and land use; the isolation and depredations of the area seem to have been endured at one turn and positively embraced at the next.

Previous archaeological work in the region had found widespread evidence of settlement and activity in the landscape. Outside the Akrotiri survey area, to the north Neolithic artefacts have been found at Trakhoni *Vounaro* (Heywood 1982) and, in the 1930s, a Chalcolithic settlement at Erimi *Pamboula* (Bolger 1988; Heywood *et al.* 1981). Episkopi was the focus of considerable activity throughout the Bronze age; settlement, city and cemetery have all been studied close to the village on the Middle Bronze Age site at Episkopi *Phaneromeni* (Carpenter 1982; Swiny 1986), and the Late Bronze Age site at Episkopi *Bamboula* (Benson 1969; 1970; Daniel 1938). North and west of the Akrotiri, the Sotira Archaeological Project found widespread evidence of prehistoric to modern occupation in the landscape, but the overwhelming majority of activity was clearly during the Roman and Late Roman periods (Swiny 2004; Swiny and Mavromatis 2000). Episkopi was also the seat of a medieval estate, and the remains of chapels, storerooms and a sugar refinery have been excavated (von Wartburg 2001;

Young 1982). Across the river Kouris is Kolossi village, also influential during the medieval period as a stronghold of the Knights of Saint John (Hill 1940); the 15th century manifestation of their castle still stands (Enlart 1987), with the remains of a sugar refinery nearby (von Wartburg 2000; 2001).

To the northwest of the survey area was Kourion. Despite the nearby Bronze Age settlements mentioned above, and the evidence for activity in the area from at least the 11th century B.C. (Buitron-Oliver 1997), the headland of Kourion itself was probably only occupied from the 8th century B.C. to the 7th century A.D.; the majority of material comes from the Hellenistic-Roman period (Daniel 1938; Murray *et al.* 1900; Swiny 1982a). At its height it was a large settlement with considerable civic amenities including a theatre, a stadium and a sanctuary dedicated to Apollo (Buitron 1979; 1981; Soren 1979; Swiny 1982a). Further evidence of its activities can be seen in the extensive cemeteries that lie close to the city (Parks 1996; Parks *et al.* 2001) and the remains of the harbour just offshore (Christou 1997; Leidwanger 2004; Leonard 1995; 1997). Rather further away, to the east of Lemesos, the city of Amathous was of similar status to Kourion, but of rather greater endurance (Aupert 1996; Balandier 2000; 2003; Iacovou 2002; Murray *et al.* 1900; Petit 2001)

Within the Akrotiri survey area itself less large-scale work has been undertaken, but it has been the focus of a good deal of archaeological attention. The earliest evidence of human activity on Cyprus has come from the hunters' processing site at Akrotiri *Aetokremnos*, which has been dated by C¹⁴ to around 10,000-9,000 B.C. (calibrated), the Akrotiri Phase (Simmons 1999). Several small, surface sites, which may date to the same period as Akrotiri *Aetokremnos*, have been

found by archaeological survey on the south of the peninsula (Simmons 1992). A stone axe, possibly Neolithic in date, was found near the Monastery of Ayios Nikolaos, in 1943 (Stanley Price 1980), and a Late Bronze Age settlement and cemetery has been recorded just east of Asomatos village (Catling 1962), but little other pre-Roman evidence has been recorded in the Akrotiri survey area.

In 1954, in advance of the establishment of RAF Akrotiri, J.S. Last conducted a survey in the south of the peninsula to record sites of archaeological importance that were to be protected from development. He identified 18, including several settlements and a large number of tombs and graves (Last 1954). Most sites were assigned a Hellenistic-Roman date, or defined as ‘ancient’; today their boundaries are marked with concrete bollards. A desktop survey was carried out in 2002 as a prerequisite for further development, just outside the base on the margins of the salt lake. This covered an area almost identical to my survey area and catalogued most of the archaeological sites within it, up to the medieval period (Wessex 2002). Most recently large amounts of Classical to Roman pottery and anchors have been recorded off the south and west coast of the peninsula at Dreamers Bay, Cape Zevgari and close to Kourion (Leidwanger 2004; forthcoming).

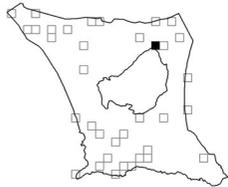
In contrast to the occasional intensity of archaeological projects investigating specific aspects of the peninsula, the constant, extensive work of the Western Sovereign Base Area Archaeological Society (WSBAAS) maintains an ongoing investigation of the archaeological material in the area. Its members range far and wide locating, recording and managing material and sites of all types, and from all periods.

Vegetation and ground cover varied considerably across the Akrotiri survey area. The north was dominated by built up areas around the villages, and cultivated land covered in horticultural plots, broad stubble fields and regimented citrus groves. Around the margins of the salt lake was rough scrub and thick growths of samphire, a fleshy, salt-resistant plant. These gave way to eucalyptus plantations and thick stands of bamboo in the north, but in the south cultivated land and the built up areas of Akrotiri village ended very close to the lake. On the south of the peninsula, although much of the ground had been built on, there were still vast areas of low batha, with spiny burnet and cistus undergrowth, and the thick juniper and lentisc of maquis in less exposed spots.

4.1 Grid Squares and Settlement Evidence

As there was so little variation in elevation across it, the whole Akrotiri survey area was treated as a single topographic zone (TZ1). Data were collected in 36 grid squares GS043-GS078, which are presented here in numerical order. Despite some apparent clustering in the randomly selected sample, all accessible ground types were covered. The areas that seem to be underrepresented were for the most part unsuitable for survey; land in the southeast was covered with RAF housing and the runway, whilst on the eastern and western arms of the peninsula salt marshes dominated. Only in the north is there a slight gap in coverage, but agriculture and citrus groves, which were the main land use here, were well covered elsewhere.

GS043



Akrotiri TZ1
498500 / 3833000
8/x/03

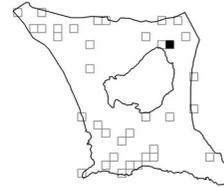
The majority of this square lay within the Sovereign Base Area (SBA); just a strip in the north, approximately 100 m wide and covered by a citrus grove, lay outside it. Within the SBA an impenetrable band of bamboo and eucalyptus gave way to low scrub on the margin of the salt lake, to the south. Much of the scrub in the southern third of the square consisted of samphire, which grew tall and thick in the damper conditions to the west. Certain fenced areas in the square were marked on the 1:5,000 topographic map as Government Plantation; some eucalyptus grew in them, away from the salt lake, but most of the deep ridges and furrows were covered in nothing but scrub.

Inside the citrus grove where the ground had been disturbed by cultivation was a thin scattering of pottery, which included coarse and fine fragments from the Late Hellenistic to Roman period.



Figure 4.2 Samphire.

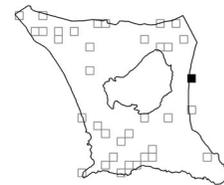
GS044



Akrotiri TZ1
499000 / 3833000
8/x/03

Only a thin strip in the north of this square lay outside the SBA; it lay in a stubble field and a citrus grove. The remainder, as in GS043, progressed through impenetrable eucalyptus and bamboo into the fleshy undergrowth of samphire and the margin of the salt lake. A very small amount of pottery was evident in this square; it comprised Late Hellenistic to Roman material similar to that found in GS043, but at a much lower density.

GS045

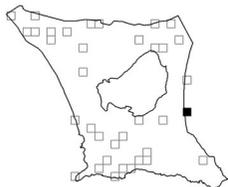


Akrotiri TZ1
500500 / 3831000
11/x/03

A narrow strip to the west of this square was taken up by wet salt marsh. East of the marsh was a broad dirt road, followed by dunes and a beach made up of sand and large pebbles. The dunes and beach were about 100 m wide, and restaurants stood at either end of the square. The ground was sterile but for several pieces of

coarse, modern fabric from the same vessel that had been thrown up by the road construction.

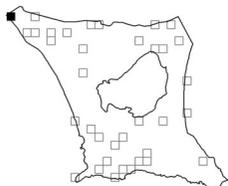
GS046



Akrotiri TZ1
500500 / 3829000
11/x/03

A narrow strip of shell- and pebble-strewn sand, and beyond it the sea. In the south of the square car parking had left a hard-packed surface on which were some very worn fragments of coarse material, probably modern building debris.

GS047



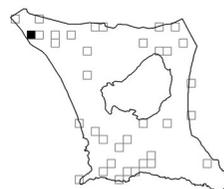
Akrotiri TZ1
489500 / 3835000
12/x/03

This square was on flat ground, barely above sea level, but much of it was cultivated: agriculture in the south and horticulture in the north. Sea occupied the southwestern quarter of the square; between the pebble beach and the cultivated land ran a rough strip strewn with modern detritus. The northwestern corner was rough ground, covered in thistles.

The agricultural fields had been harvested, leaving hard-packed, rough stubble, which, despite good visibility, yielded few artefacts. Most of the horticultural plots were covered in crops, but those that were accessible had usually been ploughed, as a consequence more material was recorded in the north of the square than in the south. Pottery identified included red slip from the Hellenistic period, pre-medieval tile, as well as Ottoman to modern coarse ware and sgraffito. There was also a fragment of pumice in the very south of the square that could have been used as a grinding stone.

The sparse pottery in the square neatly reflects known archaeological features in the vicinity. The chapel of Ayios Ermoyenis, which stood 100 m to the north of the square, is thought to date to the 8th century, although it may have been built on a far older religious site (Prousis 1982). There are several Hellenistic to Roman tombs and cemeteries in the immediate vicinity (Parks 1996; Young and Young 1955: 10), and 300 m beyond the church, at the top of cliffs, sits Kourion (Swiny 1982a).

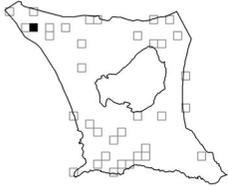
GS048



Akrotiri TZ1
490500 / 3834000
12/x/03

This square sat on the northern shore of the mouth of the Kouris River, and its southwestern corner dipped into the sea; most of the coastal strip, as in GS047,

was covered with stubble fields and, inland of them, potato fields. The majority of pottery found in the square was toward the north, and most of it toward the middle; material identified included Late Hellenistic to Early Roman sigillata and coarse ware, and Ottoman to modern utility ware. A single, probably utilised, flake of red, translucent chert could have dated from the, aceramic, Akrotiri Phase, but I found it amongst the densest area of pottery in the north of the square, none of which was so old. It is possible that the higher incidence of material toward the north and the east of the square was due to the prevalent land use, rather than any real change in density; there were more ploughed plots in this area than toward the south and the west.

GS049

Akrotiri TZ1
491000 / 3834000
13/x/03

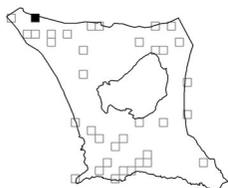
The southeastern half of this square lay across the dry bed of the Kouris River. The ground was rough and stony, and higher patches in the riverbed were covered with a layer of modern refuse. In the west, the horticultural plots noted in GS048 continued into this square, and the southeast corner was covered with stubble. Very little material was found in this square; a small collection of sherds amongst the rubbish toward the north of the riverbed consisted of rough Ottoman to modern sherds, which, given their location, were probably dumped fairly recently. Apart from the agriculture and horticulture, continuing activity in the

square consisted of pastoralism and charcoal burning. A modern *mandra* in the northeast of the square housed sheep that appeared to be allowed to roam no further than the large, adjacent compound. In the southwest of the square eight modern charcoal kilns stood amongst scrubby sand dunes at the edge of the river.



Figure 4.3 Modern charcoal burning.

GS050

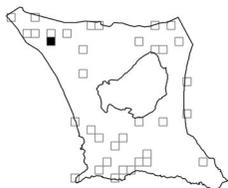


Akrotiri TZ1
491000 / 3835000
13-14/x/03

About 40% of GS050 was inaccessible due to locked enclosures and cultivated plots. South of the road that ran east/west across the square, fields of stubble predominated, although some had been ploughed. North of the road the land use was more varied and included citrus groves and vineyards as well as farmed plots.

South of the road, a moderate amount and variety of pottery – from coarse to fine – was present amongst the stubble and the plough-soil; it was all very worn and nothing could be dated more accurately than pre-Medieval. There were similar levels of pottery to the north of the road, but, whilst the types appeared similar, the sherds were even less distinct.

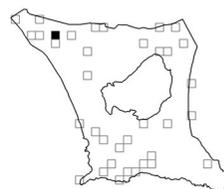
GS051



Akrotiri TZ1
492000 / 3833500
14/x/03

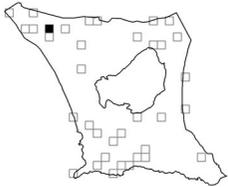
Approximately 70% of this square was accessible, and covered by stubble fields; the remainder was fenced or under growing crops. On the north edge of the square, toward the west, a relatively modern, derelict structure stood in the middle of a field; it was block-built and had a tiled roof. Too large to be a *spitaki*, its high, wide doorway suggested that it had once housed, or at least allowed access to, farm machinery. Whilst visibility was good amongst the stubble, the earth was packed hard, leaving little loose material to be found; there was, however, a low level of pottery on most of the ground covered, particularly in the southern part of the square. Of the material that could be identified, some was probably from the Classical period.

GS052



Akrotiri TZ1
492000 / 3834000
15/x/03

Stubble fields dominated this square, although there were a few vegetable plots in its northern half. Visibility in the stubble was good, but again the hard-packed ground meant that there was little loose surface material. Most of the sherds found were small and non-descript, although one handle fragment was probably from a Roman transport amphora, and two fragments of *pithos* base were probably Roman or earlier.

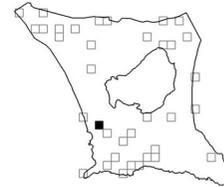
GS053

Akrotiri TZ1
494500 / 3834500
15-16/x/03

About 30% of this square, in the south, was lost to fenced plots and vegetable crops; the remainder was a mixture of citrus groves, ploughed fields and hard-packed stubble, vineyards and rough ground. South of the road that crossed the north of the square from east to west, pottery was, on the whole, abundant, despite wide variations in ground cover. Sherds were particularly visible on the margins of a potato field where they had been brought to the surface by the plough, and washed clean by the irrigation system. Ground visibility north of the road was not as good but, nevertheless, the impression was of a constant level of pottery similar to that in the south. Most of the pottery was rough and worn; the only piece that could be clearly identified was a fragment of medieval sgraffito.



Figure 4.4 Medieval sgraffito (GS053).

GS054

Akrotiri TZ1
494500 / 3828000
16/x/03
SE0055 Lithic Scatter

This square was divided in two by a cliff of loose, crumbling sandstone, which ran southeast to northwest across the southwest corner of the square. The lower quarter of the square fell on a broad, flat strip of packed sand that was about 500 m wide, and sparsely dotted with clumps of samphire. In the west of the square the ground rose toward the beach. To the east, at the top of the cliff, the ground was quite flat with a general slope downward to the north. It was covered in batha, verging on maquis; low clumps of juniper were interspersed with thyme and dried-up asphodel.

Just to the northeast of the square was an occupied *mandra*; it stood on a track less than 1 km southwest of Akrotiri village. Toward the middle of the square, in the south, a deteriorating concrete base (3 x 4 m) was probably the remains of another *mandra*, which was marked on the 1:5,000 topographical map but not on the cadastral plan. The 1:50,000 topographical map showed two churches in the area. Ayios Yeorgios stood some 600 m north of the square; there has been a church on this site since the 16th century (Wessex 2002). The second, unnamed, church was marked in the northeast of the square, but there was no sign of it on the ground, and it did not appear on any of the other maps or plans.

There was no material culture on the flat area below the cliff. In the batha, pottery was quite abundant, although it grew less common on the eastern edge of the square where the undergrowth was much thinner. Most of the material seemed to run in a broad band along the cliff edge, leaving the northeast corner of the square relatively free of material.

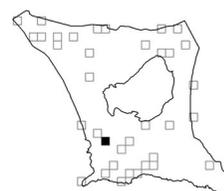


Figure 4.5 Chipped stone fragments. Possibly Akrotiri Phase (SE0055).

On a clear area of limestone, on a slight rise, approximately 500 m from the sea, in the northwest of the square, was a concentration of pottery and chipped stone with two pieces of ground stone and a short stretch of wall (SE0055). The ground stone fragments were probably gabbro, and came from a quern or a grinding slab.

The wall was vestigial at best; no more than 3 m long, and possibly two courses high, the two rows of rough pieces of limestone were all but overwhelmed by low juniper and accumulated soil. Its purpose was not clear, but it ran along a slight break in slope, and might have been a soil retention measure rather than the remains of a structure. The pottery was very worn and impossible to date with any certainty, but it was probably pre-medieval. A variety of forms and materials were present amongst the chipped stone fragments (Figure 4.5), which were spread across an area approximately 8 x 8 m; they were all very small and appeared to date from the Akrotiri phase, 10,000 B.C. The spread of lithics and shells appeared similar to similar sites found along the southern coast of the peninsula (McCartney forthcoming; Simmons 1999: 243-254).

GS055



Akrotiri TZ1
 495000 / 3827500
 17/x/03
 SE0056 Vaulted Chambers

This square lay within the Akrotiri forest boundary and ran the gamut from batha in the west, through maquis, to open forest in the northeast corner; the ground beneath the trees and shrubs was very sandy. Just outside the northeast corner of the square, a sprawling *mandra* accounted for considerable goat traffic and consequent erosion in the area.

Just east of the middle of the square, a small sandstone outcrop covered in low juniper bushes and thistles marked a slight rise in ground level; in it were the south-facing entrances to two underground chambers (SE0056). One entrance was all but blocked, but an unaimed photograph showed that the chamber was several metres deep, with about 1 m headroom.

The second chamber was easily accessible; it was 10-15 m deep, vaulted along its entire length and varied in height from 1.5 m at the entrance to 2.5 m at the back end. The floor was covered in loose rock, modern detritus and accumulated soil, which brought it well above its original level. Another arched entrance, in the back corner, issued forth beside the opening to the first chamber. It had been partially blocked with a rough, drystone wall, since the rise in the floor level,

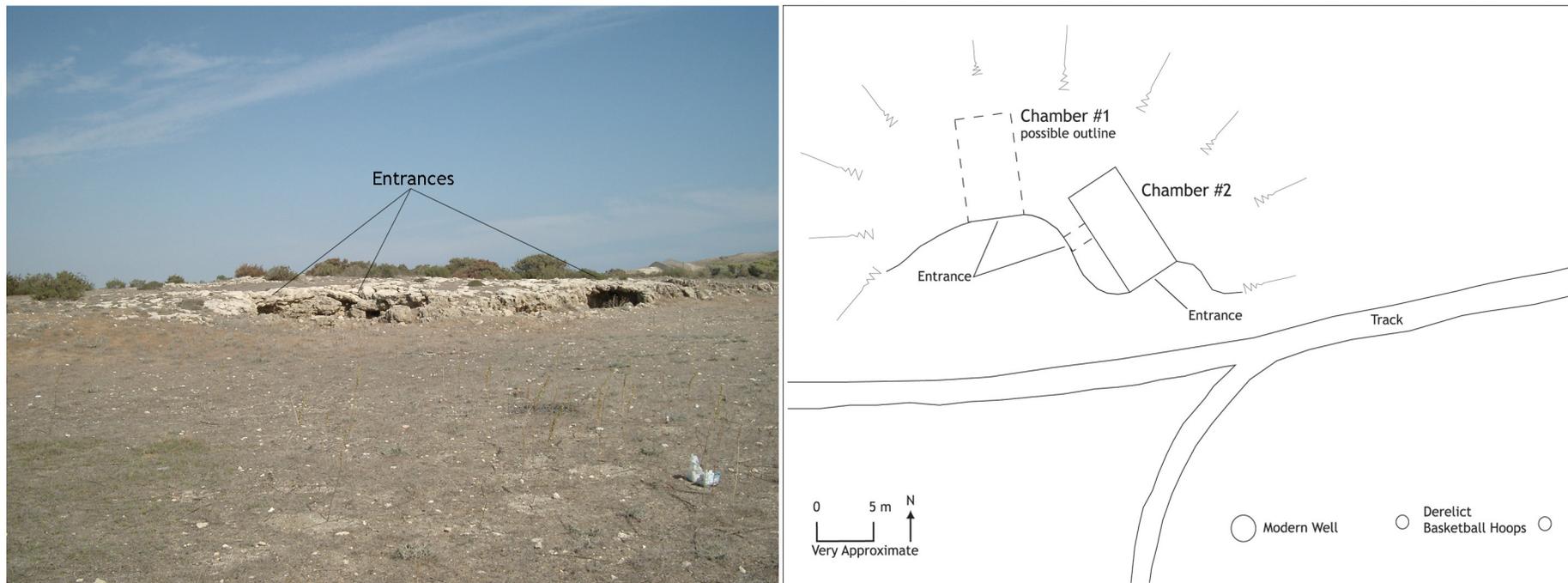


Figure 4.6 Exterior of vaulted chambers (SE0056) from southwest, and sketch plan.

suggesting that the chamber might have been used to house livestock in the more recent past. The rubbish, and a rough, rock-built fireplace, some 5 m from the back of the chamber, beneath a hole in the roof, indicate that it is still used occasionally for shelter, possibly by shepherds, or by exploring children from Akrotiri village. Small recesses had been cut into the western wall near to the entrance (Figure 4.8); they were approximately 1 m above the current ground level and measured 0.5 x 0.5 m. Another, measuring 0.3 x 0.5 m, had been cut



Figure 4.7 Interior of Chamber #2 (SE0056). Scale is approximately 1.2 m.

into the centre of the back wall, 1.2 m from the ground.

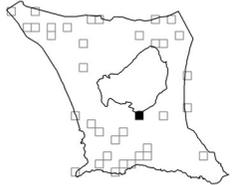
The original purpose of these chambers is unclear; the accessible one seemed too deep to be a tomb, which, had it dated from the Roman period, would have had burial niches – *arcosolia* or *loculi* – cut into the walls. The walls of SE0056, however, were uninterrupted, except for the small recesses just above current floor level. At Akrotiri *Lania* two similar, but larger and more elaborate, underground chambers are thought to have been in use during the Hellenistic and Roman periods for ‘cult purposes’ (Heywood 1982; Last 1954). There was no pottery inside SE0056, but on the outcrop, behind the entrances, there was a moderate amount of storage, cooking and tablewares, mostly from the Late Hellenistic to Roman period. On the flat ground in front of the chambers was a considerable quantity of medieval to modern sherds, and some that definitely came from the Ottoman period. The later pottery was mainly coarse ware and probably constituted breakages by workers from Akrotiri village 1200 m or so to the northeast.



Figure 4.8 Recesses in side wall (SE0056). Scale is 1 m.

The continued use of the area was demonstrated not only by the pottery around the chambers, the rubbish inside them and the nearby *mandres*, but also by the

modern, stone-built wellhead with a locked wooden cover, and two rusting basketball hoops standing 100 m away on the flat ground. The increased density of pottery around SE0056 appeared to continue for at least 100 m to the north, west and east through the batha. The situation was less clear to the south where the ground was flatter, more open and considerably disturbed by tracks and roads.

GS056

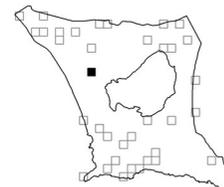
Akrotiri TZ1
497500 / 3828500
10/x/03, 7/vii/04
SE0093 Structures

Three distinct areas of land cover were apparent in this square. North of the road that ran east to west across the square, about 200 m from its northern edge, were the margins of the salt lake with a sparse covering of samphire and coarse grasses. South of the road, ground cover grew thicker until grass and small bamboo dominated at the foot of a low bank (1.5-2 m tall), parallel to and about 600 m south of the road. Beyond a rough track and a fence, along the top of the bank were gently sloping, ploughed fields and stubble, which yielded a small amount of very worn, probably pre-medieval pottery.

In the east of the square, just south of the road, was an area, spreading at least 50 m east/west, where low banks of sand had built up around rough sandstone blocks. These were probably structural remains (SE0093); there were definite

linear features, mostly straight, parallel in places, and one or two clear corners, but it was impossible to discern any clear overall organisation amongst them.

The road follows the course of a route that probably existed during the Roman period (Wessex 2002), and WSBAAS have noted structural remains built with pottery chinking, possibly Roman in date, several hundred metres to the northeast on the southern edge of the salt lake. As the lake was still open to the sea during the Roman period, it is possible that the features of SE0093 are the remains of warehouses or buildings associated with sea traffic or trade, perhaps contemporary with the much clearer foundations at Dreamers Bay on the south coast of the peninsula (WSBAAS 1995: 15-16).

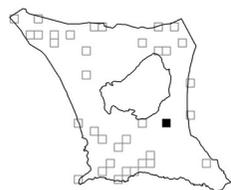
GS057

Akrotiri TZ1
494000 / 3831500
19/x/03

The very northeast corner of this square covered a small piece of domestic citrus grove and a vegetable plot, which yielded no material evidence at all. The remainder of the square fell within the Akrotiri Forest. In the southeast a eucalyptus plantation was open enough to enter, but a thick carpet of leaves, and large, impenetrable stands of trees made the survey unrewarding. Elsewhere the square was covered in reed beds and salt marsh, also unrewarding, although water management channels ran through the area. These channels are marked on

the 1:50,000 map and, although there are the remains of concrete sluice gates along them, they continue from the Venetian canal that ran from the west of the salt lake (Wessex 2002) and are perhaps built along the lines of an older network, but this seems unlikely. This marginal land was still in use; just north of the square, three *mandres* sat to the north side of the road, whilst a fourth stood to the south, on the final, very narrow stretch of dry ground, its goats grazing right down to the water's edge.

GS058

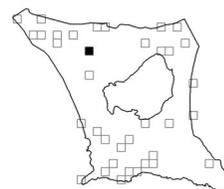


Akrotiri TZ1
499000 / 3828500
20/x/03

The land in the north of GS058 was cultivated; visibility was good in the citrus groves and ploughed fields. Further south the ground became rough, and a mixture of well-spaced, sizeable juniper, terebinth and cistus grew on a base of decaying limestone, scattered with heaps of field clearance and builders' rubbish. In the very south of the square the ground had been rough-ploughed, turning up a lot of stone and rubble, amongst which was some very worn, probably pre-medieval, pottery; one handle fragment was identified as being from a Hellenistic-Roman transport amphora. All of this pottery could have been associated with previous occupation and use of Ayios Nikolaos.

The monastery of Ayios Nikolaos of the Cats, to the west of the square, is traditionally considered a Late Roman foundation; the current buildings date from the 14th-16th centuries, and a 13th cloister incorporates elements of Roman pillars. It was abandoned early in the Ottoman period (Enlart 1987: 348; Heywood 1982: 171-173). Last (1954) identified two sites here: a settlement, which coincides with the monastery; and a Hellenistic sanctuary (Wessex 2002) at Akrotiri *Anthrobos*, where he noted abundant terracotta figurine fragments, and a quarter size, headless trunk, carved in limestone. A prehistoric stone axe, not of local material, was also found close to the monastery in 1943 (Stanley Price 1980: 15, 133).

GS059

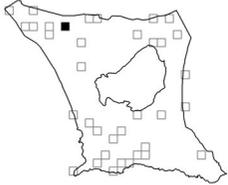


Akrotiri TZ1
494000 / 3833000
20-21/x/03

This square fell within a citrus plantation. It was interesting land to work on; whilst there was no possibility of standing, or even ruined buildings, the cultivation resulted in favourable ground conditions for pottery survey. Access was easy, except amongst the tallest, broadest trees, and the ground was regularly tilled, which circulated any pottery in the topsoil. By the same token the ground was very disturbed and the sherds tended to be small and difficult to identify accurately. Once on the surface, the pottery was regularly washed by the irrigation systems, which made it far more visible. There was a moderate level of

pottery throughout the square, all very worn, mostly coarse, and probably pre-medieval in date.

GS060



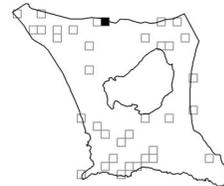
Akrotiri TZ1
493000 / 3834000
21/x/03

The majority of this square fell within a citrus plantation, although to the west was an area of vineyards, stubble and ploughed fields. There was a moderate coverage of pottery, which included Hellenistic-Roman transport amphora fragments, as well a variety of less identifiable pre-medieval, coarse and fine fragments. One piece that stood out was a base, which could have come from an Ottoman water-wheel vessel, although considering the rest of the pottery in the square, it was perhaps from a Hellenistic-Roman transport amphora.



Figure 4.9 Base from Ottoman waterwheel vessel or Late Roman transport amphora?

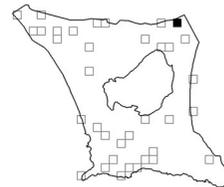
GS061



Akrotiri TZ1
495000 / 3834500
22/x/03

The northeast corner of this square disappeared beneath the western sprawl of Trakhoni village. The remainder was covered mainly with vineyards in all stages of production and decay; in the north, toward the east was a large potato field. The main road cut east to west across the square, with a wide loop to the north in the east. In the southeast of the square were two big old olive trees, both about 200 years old, with a viable well nearby. There was a wide variety of pottery and tile across the whole square, but never in great quantities. The tile and some of the pottery was Late Roman, but most sherds were medieval to modern.

GS062

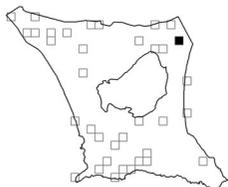


Akrotiri TZ1
499500 / 3834500
23/x/03

Much of this square was covered in roads and the western extremities of Zakaki village. In a dense citrus grove north of the main road, in the northwestern corner of the square a small amount of coarse pre-medieval fragments were found.

There was rather more pottery in a stubble field in the southeast of the square; the material was coarse, worn and probably pre-medieval, although it could have been more recent.

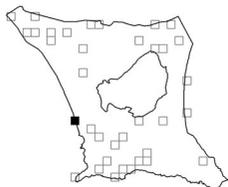
GS063



Akrotiri TZ1
500000 / 3833500
23/x/03

No more than 10% of this square was viable; a lorry park took up most of it. A little, greyish, worn pottery of indeterminate age came out of a stubble field in the west.

GS064

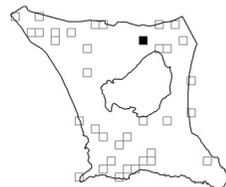


Akrotiri TZ1
493500 / 3828500
23/x/03

About 60% of this square was sea; low clumps of samphire grew on the flat, salty sand and pebbles that covered the remaining 40%. The area is marked as coastal sand and gravel pits on the 1:5,000 topographical map. The flat ground rose to a bulldozed bank of sand and stone covered with well established, if sparse,

undergrowth and gorse. Modern dumping provided the only material culture in GS064.

GS065



Akrotiri TZ1
497500 / 3833500
24/x/03
SE0058 Mosque
SE0092 Cemetery

The road between Zakaki and Phasouri cut across GS065, and Lanitis Farm buildings occupied most of the land to the north of it; south of the road citrus groves of varying density held sway.

South of the road there was a moderate level of pottery of different types; little of it could be dated more accurately than medieval to modern. Kitchener (1882) shows Cherkez *Chiftlik* in the northeast of the square, straddling the road, so much of the pottery may be Ottoman, although a Hellenistic-Roman transport amphora handle fragment shows that earlier material was also present. An apparent decrease in pottery toward the west might have been due, in part, to the size of the trees, but it could also be indicative of the move away from the centre of habitation marked on Kitchener's map.



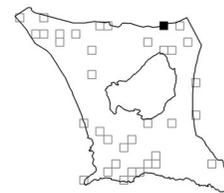
Figure 4.10 Interior of mosque (SE0058).

North of the road, in a small citrus grove to the east of the Lanitis Farm buildings, stood a ruined mosque (SE0058). The cadastral plan identifies it as a Jami, a large, congregational mosque. Its external measurements were 8 x 8 m and it stood up to 4 m high; the double-skin walls were built with worked limestone blocks, stone chinking and mud bonding, and showed traces of plaster both inside and out. Seventy metres to the north was an abandoned Turkish cemetery (SE0092). Only its enclosing wall (30 x 60 m) survived; it was double-skinned and built from large, worked limestone blocks, some of which had

visible chisel marks on them, coarse stone chinking and mud bonding. It stood to a height of 1.5 m across the short, south side of the enclosure, where there was an entrance, but the other sides were largely tumbled. The interior, containing a couple of neglected olive trees, bulldozed heaps of earth and tractor tyres, was overgrown with rough grass and thistles.

An employee of Lanitis Farm told me that refugees from the Caucasus had settled this swampy area in the late 19th century; this was their mosque and cemetery, which had been left undisturbed because they were sacred. Whilst some of the refugees had settled in Asomatos, a little to the southwest, most had lived in scattered houses, rather than a village. All had died of malaria by the 1930s when the area was drained to plant citrus plantations.

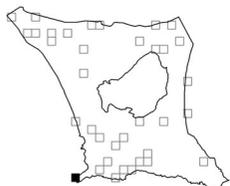
GS066



Akrotiri TZ1
498500 / 3834500
27/x/03

This square straddled the road between Trakhoni and Zakaki, and was entirely covered in citrus groves. Despite the good visibility I found very little pottery; there was a slight increase toward the middle of the square in the south, but still no significant quantities. A small amount was probably Late Roman, but little of it could be dated even this surely, and might have been pre-Roman or medieval to modern. A possible fragment of grinding slab was also found.

GS067

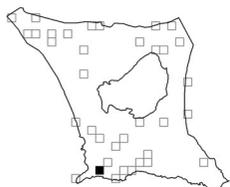


Akrotiri TZ1
493500 / 3825000
29/x/03

Approximately 75% of this square was on dry land; below the cliff line, decaying sandstone descended toward the water in a series of natural steps. Above the cliff was a golf course, dotted with patches of scrub and protected from the elements by a 2 m high, bulldozed windbreak. The ground was very disturbed, but there was still a good scattering of pottery across the square, on the sandy tracks across the golf course, leaking from the bulldozed bank, and even below the cliff line. Most of the material appeared to be pre-medieval, some of it possibly Hellenistic.

Recent underwater survey recovered material dating from the Classical, Hellenistic and Roman periods (Leidwanger 2004) in, or just outside, parts of GS067 that were inaccessible to me.

GS068



Akrotiri TZ1
495000 / 3825500
29-30/x/03
SE0057 Pottery
SE0059 Rock-cut hole

About half of this square was covered in low maquis or batha, whilst the rest of it had been disturbed by the golf course, target ranges and fences of RAF Akrotiri.

Much of the ground on the ranges had been scraped flat and clean of any artefacts; four holes (0.5 m deep) had been dug on one of them and there was no sign of pottery in the topsoil thus revealed. Elsewhere, however, despite very thin topsoil to the north of the road, there was a constant scattering of pottery across most of the square, which continued into GS070 to the northeast. A considerable amount of material was identified as Hellenistic-Roman, and some might have been older; it included coarse, fine and cooking wares as well as tiles and transport amphorae. In the northwest of the square there was a small number of later, medieval to modern, sherds in the mix. Several fragments of Roman glass were found, which probably came from grave items such as bowls and flasks. Five coins to the south of the road lay within a 10 m radius; all were Roman, all bronze, except one silver coin. Two other bronze coins were found further to the west, and one was well enough preserved to be dated to the reign of Constantius II (AD 337-348). Two small marble fragments in the square were probably from imported vessels.



Figure 4.11 Coin – Constantius II.

A particularly dense patch of pottery (SE0057), just outside the fence in the northwest of the square, was probably part of the spread from Katalimata ton Plakoton, a large settlement identified by J.S. Last (1954) that seems to be the

most likely candidate for the Classical town of Kurias, which is how Kitchener (1882) labelled it. He recorded extensive remains, which were being quarried by the locals, and included walls, wells and fragments of marble columns. The area has since become overgrown with juniper and thyme, but the remains are still evident and local archaeologists have identified a basilica with a mosaic floor.

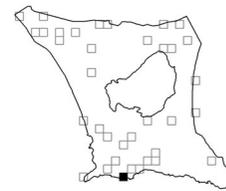


Figure 4.12 Xenotaphin (SE0059) and Late Roman unguentarium 6th–7th century.

Xenotaphin (SE0059) lay some 200 m to the south of SE0057; Last recorded it and enclosed a small, low knoll, but did not identify its purpose. Pottery was rather thicker on the ground on its scrub-covered slopes than on its weathered summit, from where the sea was visible to the south and the west. Cut into the

summit was a square hole, slightly less than 1 x 1 m; it was all but full of soil, and contained one or two fragments of pottery, including part of a Late Roman unguentarium (Figure 4.12). The hole was the only obvious feature, but Frank Garrod, of WSBAAS, told me that 10-15 years ago, the scrub was lower and rough traces of walls were visible on the knoll. It is possible that this was a small sanctuary site on the edge of the settlement at Katalimata ton Plakoton, but the locality name, Xenotaphin (foreign tombs) suggest that the area has been associated with burial, despite the lack of obvious tombs.

GS069



Akrotiri TZ1
496000 / 3825000
30-31/x/03
SE0060 Tombs
SE0061 Church?
SE0084 Structure

Thick maquis ran down the prevailing, south-facing slope and stopped about 100 m before the sea, which occupied the southern 30% of this square; tall cliffs in the west diminished to a rocky beach in the extreme east. The final 100 m strip in the south was almost devoid of topsoil, but low thyme grew there, as did occasional juniper and lentisc, particularly in the numerous tombs and cist graves (SE0060) that were cut into the rock. The plentiful Hellenistic-Roman pottery in this area was evenly spread, rather than concentrated around the tomb entrances; fragments of transport amphorae and cooking ware were common, both of which are often found in burial contexts. Near one tomb entrance was a rectangular

block of limestone whose upper surface had been carved out to a depth of 20-30 mm, leaving a raised margin approximately 100 mm wide (Figure 4.13). It had features in common with an olive press bed (Hadjisavvas 1992), although its location a few metres from the cliff edge suggests that if this was its purpose it was unlikely to have been in its original context.



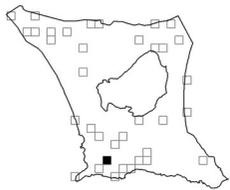
Figure 4.13 Carved block (SE0060).

The density of pottery was overwhelming across the whole square, even into the dense maquis, where similar periods and types to those around SE0060 were represented. In the east of the square, on the final slope down to the beach, pottery was particularly thick on the ground, and two bronze coins were found amongst it. The pottery may have been an overspill or continuation from Dreamers Bay, 350 m to the east, where the foundations of three Roman warehouses can be seen amongst a thick carpet of sherds. However, fragments of glass bowls and goblets were also found in the southeast of the square, and these are usually associated with Roman burials. Also in the vicinity, the remains of low walls marked a structure whose maximum extent was approximately 6 x 6 m (SE0084); the rough blocks stood little more than 2 courses high, and there were signs of more than one phase of construction. Whilst there was pottery in the general area, there was nothing that was clearly associated with the walls that might hint at their purpose. WSBAAS (1995: 17) recorded the structure several years ago, when they noted abundant pottery and painted plaster fragments, suggesting that the remains were of a private house rather than a warehouse.

The burials were not restricted to the coastal strip; some 200 m in from the cliff edge, at a slight step in the bedrock, was a line of tombs and graves that extended some 30 to 40 m northeast/southwest. Close to one cist grave, in a small clear patch in the maquis, what appeared to be part of the outline of a structure was cut into the limestone. There were a few blocks of worked stone nearby, which included fragments that could have been pieces of column marble and one that might have been a limestone capital block. The stone combined with the curve in the eastern end of the outline cut into the bedrock suggests that this might have been a small church (SE0061). Once again there was no pottery closely

associated with the structural remains to help date the structure or to clarify its purpose. 100 m or so to the northeast, along the line of the caves and tombs was a large, collapsed cave; it probably measured 10x10 m, but was too overgrown to record in any detail or to see if it was a tomb with surviving chambers further underground.

GS070



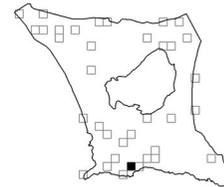
Akrotiri TZ1
495500 / 3826000
30/x/03 & 4/xi/03

A small area in the south of GS070 was covered in modern development, but the majority was low to medium maquis with attendant juniper, terebinth, cistus and thyme, which got thicker toward the west of the square. In the very north of the square, a concentration of rough limestone blocks approximately 6 m in diameter could have been the remains of a structure. There was, however, no sign of building amongst the tumble; the stones were covered in grey, black and orange lichen and had certainly remained undisturbed long enough to become too overgrown to record in any detail. There was no identifiable pottery nearby, but there was, perhaps, an increase in density over the 100 m to its south.

Most of the square had a reasonable covering of pottery and the material was similar to that found in GS068, to the southwest; Hellenistic-Roman domestic wares, transport amphorae and tile. There were several small chunks of rough

marble scattered throughout the square, which suggests a structure of some standing, and one very small fragment of glass from the south probably came from a Late Roman, conical lamp of the sort found in basilicas. Pottery and three bronze, Roman coins were found along and beside a track through the scrub, suggesting that it may have run along the line of an older route, which led westward to Katalimata ton Plakoton (SE0057).

GS071



Akrotiri TZ1
496500 / 3825500
31/x/03

SE0062 Pottery
SE0085 Cist Graves and Quarrying

This square just breasted the ridge that rose up from Dreamers Bay. On top of the ridge there was virtually no ground cover, just bare limestone, but on either side of it a strip of cistus and thyme developed into maquis as the depth of topsoil increased. There was a suggestion that the footings of a medieval tower have, in the past, been seen within the fenced rubbish dump that occupied the northwest corner of the square, but no more information was forthcoming and nothing is shown on the maps.

There was an area of cist graves, all aligned east/west, and quarrying (SE0085), just south of the square, continuing the line of tombs first encountered in GS069. These were probably Late Roman (Parks 1996) despite the lack of pottery in the vicinity to confirm it. Nor was there much pottery on the top of the ridge in the



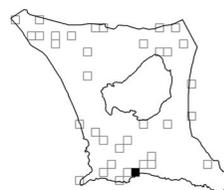
Figure 4.14 Roman handles (SE0062).

north, but it was quite abundant across the rest of the square. The varying ground cover doubtless had an effect on the apparent density of pottery on the ground, but was probably not the only cause for occasional hot spots that were noted; SE0062 for example, lay on broken, batha-covered slope just below a flat area

measuring about 20 x 10 m. The pottery was abundant and a moderate amount of tile was also present; almost all of the material was Late Roman and included fine ware, cooking ware and transport amphorae that might have come from tombs (Figure 4.14).

Three bronze coins were found in the square; one, possibly Late Hellenistic, was found in the south, near the tomb-line, the other two, both Roman, were found on the south-facing slope, around the middle of the square. There was also a little Roman glass here, apparently fragments of flasks from the tombs.

GS072



Akrotiri TZ1
497000 / 3825500
31/x/03
SE0063 Cist Grave

The southeast corner of the square was lost to the sea, and a small area in the northeast corner was behind a fence. As in GS071 the northern part of the square was just over the crest of the scrub-covered slope rising up from the coast. Around 150-200 m from the cliffs the ground sloped gently, and thick clumps of tall juniper were interspersed with patches of thin grass and bare earth. South of the junipers, and along the top of the ridge, bare bedrock dominated.

In the southeast of the square a double cist grave (SE0063) was cut into the bedrock at the last break in slope before the cliff edge; there was no associated

material culture, but most cist graves are Late Roman. There was, however, pottery over most of the areas where the scrub and juniper was growing, with similar variations in distribution to GS071; again, there was an assortment of types, mostly Late Roman in date.

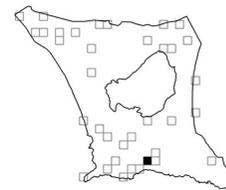
Parallel ruts that had been cut or worn into the bedrock led down to the remains of an extensive quarry some 300 m to the east of the square, which may well have provided the material to build Pano Katalimata (SE0064, GS074) which lay barely 600 m to the northeast. There was also considerable activity in Dreamers Bay to the south and the west, and it is possible that the concentrations of pottery away from the cliffs, both here and in GS071, indicate accommodation for workers at either the port or the quarry. Given the proximity of Pano Katalimata, however, and the lack of structural evidence, it seems more likely that the considerable amount of pottery in the square came from the numerous graves and tombs.



Figure 4.15 Cart ruts leading to Roman quarry to east of GS072.

About 400 m upslope from the cliff edge a scatter of 15 bronze or copper nails lay within a 1 m radius. They were all different shapes and sizes, both square and round in section, some were encrusted with barnacles, and the nails had probably been collected on the beach and dumped in their current context relatively recently.

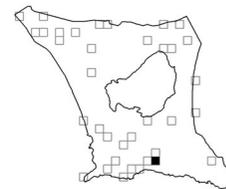
GS073



Akrotiri TZ1
497500 / 3826000
3/xi/03

A narrow strip of rough ground between developed and fenced areas, this square consisted of a band of tall, thick shrubs, worn grass, and tracks. It yielded a handful of diverse, dispersed and unremarkable sherds, which, given the proximity of Pano Katalimata were probably Late Roman.

GS074



Akrotiri TZ1
498000 / 3826000
3/xi/03
SE0064 Settlement

Pano Katalimata (SE0064), one of the areas identified by Last (1954), occupied most of this square; the remainder was covered by modern housing and a stable. The preserved area stood slightly above its surroundings, with an overall slope to the south. The remains of the settlement were visible as mounds and hollows covered in rough grass and thick patches of juniper, terebinth and gorse; at the centre of the square there was one particularly large hollow, measuring approximately 50 x 30 m.



Figure 4.16 Roman roof tile (SE0064).

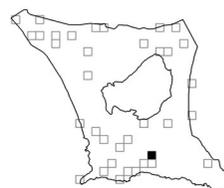
The ground was liberally scattered with rough limestone chunks, which were generally quite small with no obvious signs of having been worked. Last (1954) also saw only rough stone, and reported that the area had been quarried for building material. The material was still being disturbed by local children who used the rubble to build camps and dens. Two possible wells were identified in the area; these small depressions were filled with limestone blocks, some of which showed signs of having been worked. Amongst the building rubble were some large, smoothed igneous rocks that appeared to have been used as grinding stones. Whilst it was possible to

identify mounds that represented buildings within the settlement it was impossible, given the scale of my project, to survey the area in any detail.

Last recorded this as a Graeco-Roman settlement, which is borne out by the material in the area. The thick scatter of pottery and tile across the area consisted, on the whole, of large, rough pieces of pithos and roof tile from the Hellenistic or Roman periods. There was, however, some finer material, which tended to be later Roman. A bronze coin that was probably Roman was found near the edge of the settlement and there was at least one piece of Late Roman glass – the base of a lamp of a type likely to be found in basilicas rather than tombs.

It seems likely that Pano Katalimata (SE0064) and Kato Katalimata (GS075, SE0065) were part of a single Hellenistic-Roman settlement with one main area of habitation on either side of a shallow, fertile valley.

GS075



Akrotiri TZ1
498000 / 3826500
3/xi/03
SE0065 Settlement

This square covered most of Kato Katalimata (SE0065), one of the areas identified by Last (1954), and the terrain and groundcover were similar to those at Pano Katalimata (GS074, SE0064). Around the undeveloped area the square had been rendered sterile by construction and landscaping.

The grassed over features scattered with loose stone suggested, once again, an extensive area of building. Three sections of wall with clear faces and corners lining a rectangular depression, just south of the centre of the Last area, indicated a structure measuring approximately 5 x 5 m. Rather closer to the centre, toward the northwest of the square, a low section of curved wall was probably the apse of a basilica; another stretch of wall, 20 m to the south, appeared to be associated with the same structure. In the past, WSBAAS members have recovered mosaic tiles and brass fixings for wall marble from the site, and there is a local story that columns were taken to a nearby local church, but no details were available. There was still a considerable amount of marble in and around the basilica; it was mostly worked fragments of column marble, but one small piece was particularly intricately carved. There was also a quantity of high quality, Roman cover tile fragments amongst the marble.



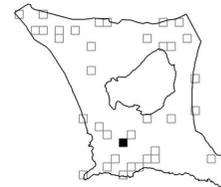
Figure 4.17 Interior of ruined structure at Kato Katalimata (SE0065).

The moderate amount of pottery in the square was similar to that found in GS074, but there was little other material. In the extreme west of the square was a huge, broken piece of ground stone; two of the surfaces showed signs of extensive wear, but its purpose was not clear.



Figure 4.18 Large worked stone at Kato Katalimata – 0.8 m tall (SE0065).

GS076

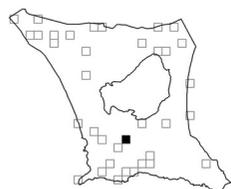


Akrotiri TZ1
496000 / 3827000
4-5/xi/03

75% of this square was accessible; the forest that covered it in the north thinned out, giving way to low batha – thyme, cistus and a few juniper bushes – which in turn became sparser until the bedrock was almost bare on the slope of a small hill in the south of the square. Two of Last’s (1954) ancient settlements lay to the southeast of this square; the description is slight, but one of them showed signs of building rubble, tiles and Roman pottery, and the other may have been the ‘so-called Church of St. Mark.’

Pottery was thickest on the ground in the south, toward the middle of the square – amongst the scrub on the gentle, north-facing slope above the forest. The majority of identified sherds were Late Hellenistic to Roman and included fine ware, cooking ware and transport amphorae; a little of it might have been post-Roman, but could not be dated accurately. There were occasional fragments of wall marble and Roman glass throughout the square, and a bronze, possibly Roman, coin was found on the track that crossed the shallow slope toward the southwest of the square.

GS077

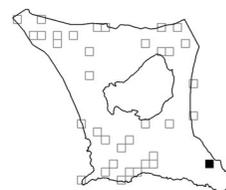


Akrotiri TZ1
496500 / 3827500
5/xi/03

Parts of this square were fenced off, and the main road ran north/south across it; to the west of the road was forest, occasionally very dense, and to its east patches

of open forest and scrub. There was very little material on the ground, no more than a handful of rough, worn sherds on either side of the road. In the southeast corner of the square, there was a slight rise in pottery density, but this was probably the result of improved ground visibility in the scrub.

GS078



Akrotiri TZ1
501500 / 3826000
6/xi/03
SE0066 Settlement

Most of this square was accessible and the patchy grass dotted with well-packed clumps of juniper. A road ran northwest/southeast across the square with a roughly parallel track on either side.

Hellenistic-Roman pottery was present at a low to moderate level, particularly in the northeast of the square; *pithoi*, transport amphora, cooking ware and finer vessels were all present. Last’s (1954) Shiliastasia settlement (SE0066) lay in the west, almost entirely within the square, and pottery was far more common within the marked area, where there was also glass and marble fragments. Slightly west of the centre of the Last area was a cluster of tombs, all of them blocked. One appeared to have had a structure built up around the entrance to its *dromos* (Figure 4.19); a drystone wall lined a hollow in the ground around the entrance to the tomb, and there was a considerable amount of Roman roof tile amongst the rubble of the collapsed sections of wall.

Pithoi are not usually associated with tombs, and there was a considerable amount of other evidence for occupation, as well as burial, in the square. There was a well, and scatters of limestone blocks cropped up across the whole of Shiliastasia. In its eastern half there were several stretches of low wall; one of these appeared to be a curved end wall, but the full extent of any building it might have been part of was masked by thick juniper.



Figure 4.19 Drystone construction around tomb entrance at Shiliastasia (SE0066).

4.2 Occupation, Exploitation and Communication

Today there is little of the Akrotiri area that is rendered inaccessible by the landscape itself; much of it, however, lies behind the fences of large citrus farms and the RAF. The advantage of the RAF fences was that they restricted access to large areas without always developing the land within, leaving large areas of maquis and batha all but undisturbed. Between the built up areas that dot the survey area the land ranges from heavily cultivated to rough batha and marshland. The continuing occupation and exploitation of the area meant that access to all parts of the survey area was, with the fence-builders' permission, relatively easy. On the other hand, it also meant that few structural remains survived in the north, and those in the south seldom stood above ground level. There was usually enough pottery associated with those structures that did remain, however, to date them with reasonable confidence; James Last (1954) reported sufficient Late Roman pottery on the surface in the south of the area to suggest the existence of a settlement of considerable size. The quantities were less in the north, but there was nevertheless sufficient pottery on the surface, across the whole survey area, to suggest settlement and activity in the region from the 4th century B.C. to the present.

Roman Period

Whilst much of the structural evidence found in the south of the Akrotiri area was probably Roman, the pottery evidence was not distinct enough to rule out occupation during the Hellenistic period (4th century B.C. to 1st century A.D.) as well. The remains of a rectangular site noted by the Western Sovereign Base Area Archaeological Society (WSBAAS) at Limnes tou Ayiou Yeorgiou (Wessex 2002) and, a little to the northwest, the transport amphorae and a marble

statuette recovered from a Hellenistic or Roman shipwreck in gravel beds inland from the current shoreline (Karageorghis 1978: 884) indicate that the western arm of the peninsula was probably fully formed in this period, even if it was somewhat narrower than it is today. The eastern arm of the peninsula was still open to the sea.

Whilst the city of Kourion is well known and stands just outside the survey area to the northwest, there has long been considerable debate as to whether the name Kourias referred to a large settlement on Akrotiri or to the promontory itself (Heywood 1982: 173). In 1590 Porcacchi (1908: 163) wrote of Kourias as an ancient city in the middle of the peninsula, to the south of the salt lake; presumably an observation based on a knowledge of the classics and whatever structural remains he might have seen or heard about. On the other hand, in 1738 Montague (1998: 30), on the authority of Herodotus, ventured that Kourias had been a royal city, and appears to apply the name to Kourion, the exact location of which was itself unknown at the time (Swiny 1982a: 91). Strabo (Geog.: 14.6.3) mentions 'Curias, which is peninsula-like', whilst Pliny includes the name in his list of coastal towns (Leonard 1997), but possibly referring to Kourion (Leonard 1995: 232 n.14). Ptolemy appears to follow Strabo's line; on an edition of his map, printed between 1478 and 1508, the Akrotiri peninsula is labelled 'Curias Extrema' (Stylianou and Stylianou 1980: 173), and he does not include Kourias in his own list of coastal towns on Roman Cyprus (Leonard 1997). It is possible that Kourias has always referred to the peninsula and Kourion to the city, and that the confusion arose from the alternative spellings used in the ancient texts. It seems more likely, however, that the peninsula shared the name with one of the

towns built on it. Katalimata ton Plakoton and the combined Pano and Kato Katalimata are prime candidates, and the former was given the label by Kitchener when he produced his map in 1882.

The familiar Roman settlement pattern of a city surrounded by farmland, farmsteads and estates is evident in the evidence from the northwest of the survey area close to Kourion. McFadden (1946: 449) reported up to six metres of rain-washed silt over a Hellenistic tomb in the Ayios Ermoyenis necropolis (200 m northeast of GS064), and there would seem to have been at least 2.5 m of it above the Late Roman ground level (McFadden 1946: 458). Whilst it is impossible to rule out settlement this close to Kourion, it seems unlikely that McFadden's considerable deposit conceals any settlement. None has so far been found in the immediate environs of Kourion, and Swiny and Mavromatis (2000: 449) recorded their closest example some 4 km from the city. The land in the northwest of my survey area was close enough to Kourion to have been worked by commuting farmers who would have had no need for any more than rudimentary shelter in the fields. Thus the pottery recorded in the northwest of the Akrotiri area was probably the dispersed content of tombs, or the manuring and dumping halo built up around Kourion, and was kept near the surface by the continued cultivation of the fields. Kourion, then, stood at the centre of this particular settlement pattern. Inhabitants of the city worked the farmland that immediately bordered it and which was consequently devoid of settlement itself. Beyond this the more distant farmland was dotted with farmsteads and estates that, whilst dispersed, still had Kourion at the nucleus of their economic and political system.

In the south of the area there is far more settlement evidence (Last 1954), in a much smaller space, with far less easily cultivable land. It seems likely that the economy of the settlements on the south of the peninsula relied heavily on the trade that passed through the numerous harbours and anchorages around the coastline (Leonard 1995), whilst any farming that took place was far closer to subsistence level than that carried out in the north. Three of Last's settlement sites were quite large: Pano Katalimata (SE0064), Kato Katalimata (SE0065), and Katalimata ton Plakoton (between GS068 and GS070). He described Pano and Kato Katalimata as a single settlement, closely built but divided in two, adding that the small, fertile valley between them could hold buried remains. These were never identified, but he did record a stretch of wall that connected the western ends of the two areas. If the two Katalimatas did comprise a single settlement it would have measured at least 1000 x 500 m; this represents a settlement of considerable size when compared with Kourion (800 m from the Amathous Gate to the North Gate) and Amathous (600 m across the lower area below the acropolis). Katalimata ton Plakoton, which was just 2.5 km to the west of Katalimata, measured at least 500 x 500 m.

The two sites produced considerable quantities of Hellenistic-Roman pottery, and there were distinct structural remains at both, including basilicas with, at Katalimata ton Plakoton, a mosaic floor. Clearly they were large, important settlements, or towns, but probably not of the same order as Kourion or Amathous. Last (1954) identified several smaller settlements in the south of the peninsula, giving the impression – if they were concurrently occupied – of a well-peopled, although not crowded, landscape. This being the case, Katalimata and Katalimata ton Plakoton could, perhaps, be seen as the primary sites within a

local hierarchy of settlement, and more aptly compared with Kalavassos *Kopetra* than with either Kourion or Amathous. *Kopetra* was one of four larger, nucleated settlements within a wider system of habitation sites in the Vasilikos valley (Rautman 2003). It had at least two basilicas and the material culture recovered attested to a comfortable daily life for at least some of the inhabitants, whilst differing social levels were evident in the structures which comprised it.

The results of this survey give no indication whether or not all the Hellenistic-Roman settlement sites across the south of the peninsula were occupied simultaneously or if, as seems reasonable over such a long time span, there were shifts in emphasis and location of settlement. One or two small differences at Shiliastasia (SE0066) could point to it flourishing at a different period to, say, Katalimata. Whilst by no means clear, there did appear to be more Hellenistic material at Shiliastasia, and in GS068 in general, than elsewhere on the peninsula. In addition the tombs that were built on the edge of the habitation area, in contrast to other settlements, could indicate different burial practices from a different time period. Alternatively this could just be the sort of variation that might be expected within a group of settlements.

The stretch of wall that connected the two areas of Katalimata ran due south to the sea (Last 1954) and is presumably the wall foundation shown on the cadastral plan, running from the middle of the settlement area to the coast. This points toward Katalimata being a single settlement with a territory that extended all the way to the cliffs. This is not to suggest that the entire area was built up, but the wall indicates a deliberate, constructed boundary between two defined zones – inside the settlement and outside it. If the two were contemporary, the wall would

have separated the settlement from the harbour at Dreamers Bay, and from the quarrying more immediately to its west. It is possible that it was deemed desirable make a clear distinction between the zones of transitory occupation and transaction at the port, and the civic permanence and settlement in the town.

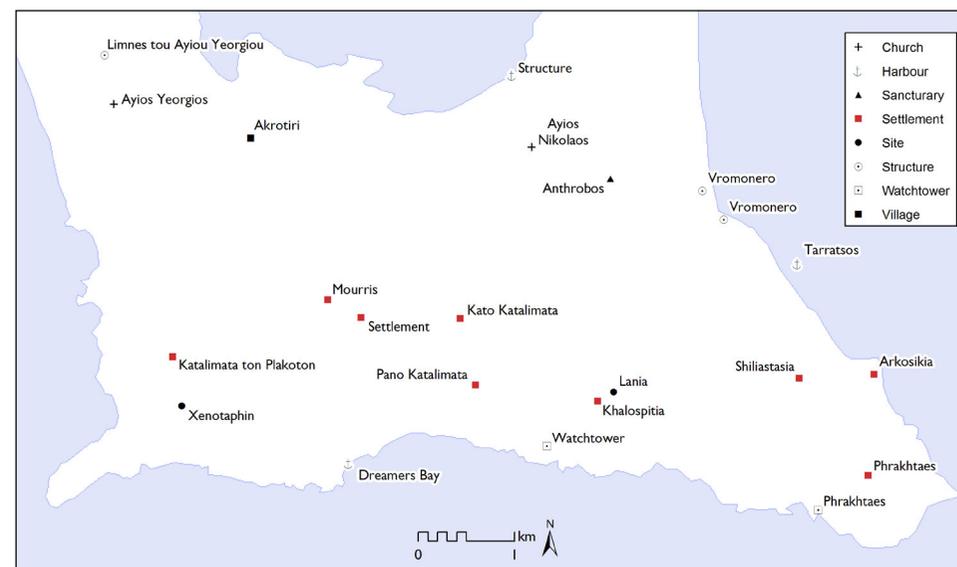


Figure 4.20 South Akrotiri. Settlements are those identified by Last. Duplicate names occur when multiple sites are located in the locality for which they were named.

The volume of trade at Dreamers Bay was immediately evident, although not quantifiable, from the thick layer of pottery debris that carpeted the ground; some sherds were Classical or Hellenistic, but most were Late Roman, light utility

ware including items from Tunisia and, possibly, Greece. There are also the footings of several buildings that have been identified as warehouses, and 400 m to the east the foundations of a harbour wall (WSBAAS 1995). This may be the clearest example of a harbour on the peninsula but there is further evidence, both inside the salt lake and out, that there was considerable provision for communication by sea during the Hellenistic-Roman period, perhaps a necessity for an area in which cultivable ground was at such a premium. Off the east coast of the peninsula at Akrotiri *Tarratsos* are the remains of a stone-built mole (Wessex 2002), perhaps a formal anchorage for vessels waiting to enter the salt lake itself where, on the southern shore, WSBAAS have recorded structural elements that could have comprised a jetty. Finally the unidentified structures close to the lake in GS056 (SE0093) also seem likely to have been associated with some kind of seaborne activity, but the site would require further investigation to confirm this.

The combination of the limestone bedrock with the amount of construction that took place in the Hellenistic-Roman period makes it unsurprising that there are a large number of graves and tombs, as well as many signs of quarrying on Akrotiri; in one place wheel ruts leading away from one of the quarries have been worn or cut into the bedrock (Figure 4.15) (Heywood 1982: 169). Succeeding communities, with different requirements, exploiting the available resources have led to quarrying and burial evidence at the same site. At the Amathous Gate cemetery, for example, the rock was first tunnelled into to create chambered tombs, then reduced to ground level by quarrying and finally dug into for cist graves (Parks 1996; 2001). There are also numerous traces of this continued extraction amongst the Roman tombs along the cliffs of the south coast, where in

one place, there is even an unfinished millstone still in place (Heywood 1982: 169). The limestone chambers at Lania have been extensively quarried (Last 1954) and whilst some of this must have occurred during their construction there are clear signs that it continued after their completion, or recommenced after their desertion.

The similarity between the methods employed in quarrying and tomb or grave construction might suggest that the same, skilled workers carried out both tasks. At least 150 Early Roman chambered tombs and 50 Late Roman cist graves have been counted along the cliffs to the south of Kato and Pano Katalimata, and the unstable nature of the cliffs in the regions would suggest that many more than this have already been lost to the sea. The sheer number of burials would be enough to suggest a specialist workforce, and the precision with which the cist graves were made adds weight to the argument; there is a maximum variation of 80 mm in the dimensions of all 50 graves (Heywood 1982: 169), and a similar consistency has been recorded at the Amathous Gate cemetery at Kourion (Parks 1996; 1997).

The primary quarrying, the large-scale removal of blocks from the bedrock, is probably contemporary with the widespread occupation of the south of the peninsula during the Hellenistic and Roman periods. Secondary quarrying, the plundering of ancient settlements for building materials, is more likely to have occurred in subsequent periods when settlement patterns and the needs of the local population had changed. Second-hand Roman elements were incorporated into the medieval cloisters at the monastery of Ayios Nikolaos (Enlart 1987: 350), for example, and there is a story that the door to a local church is flanked

by marble pillars taken from the basilica at Kato Katalimata. Last certainly reported that the ancient settlements were still being used as a source of building stone in the middle of the 20th century (1954).

There is some evidence that the spiritual well being of the living was catered for on the peninsula beyond the honouring of the dead. Despite its name, ‘foreign tomb’, Xenotaphin (SE0059) was, perhaps, not a grave at all; its location seems impractical for tomb building and it appears to be on its own, unlike other burials on the peninsula. Last (1954) did not classify it, but simply labelled it with the locality name, which might have originally arisen from an assumption that any hole in the ground was an ancient burial site. The small knoll on which Xenotaphin sits raises it up and it would have been visible from Katalimata ton Plakoton, which lay 200 m or so to the north; it might even have been built on the margins of the town. The slight elevation of the site would have emphasised the prominence of any building on it, and Frank Garrod of WSBAAS suggested that it could have been a sanctuary frequented by inhabitants of the nearby town. This is not unreasonable, but more certain evidence for a sanctuary was found at Anthrobos where ‘there were large terracotta figurine fragments all over the surface’ and ‘a headless trunk ... in limestone’ (Last 1954). The figurine fragments were dated as Hellenistic-Roman, whilst the statue is more likely to have been Classical to Hellenistic.

Less clear than Anthrobos, but obviously not the remains of straightforward occupation, were the rock-cut chambers at Akrotiri *Lania* (Last 1954), which were ‘purportedly used for cult purposes’ in the Hellenistic Roman period (Heywood 1982: 168; WSBAAS 1995: 9). Their precise purpose remains

unclear, but there were water cisterns nearby, one of which was 7 m deep, and the site showed some evidence of continued use into the medieval period, perhaps by inhabitants of the nearby settlement at Khalospita (Last 1954). Similar, but rather less elaborate than *Lania*, was the subterranean chamber, possibly chambers, in GS055 (SE0056) some 4.5 km to the northwest; if an underground cult was active on the peninsula in the Hellenistic-Roman period then it was not, perhaps, exclusive to *Lania*.

There was no evidence in the Akrotiri survey area for occupation during the Byzantine period and perhaps the peninsula was abandoned either after earthquakes in the 4th century or in the face of Arab raids in the 7th. The pottery evidence across much of the area dates from the Late Roman period, as would the Christian basilicas, which suggests that even if the earthquakes changed the pattern of settlement on the peninsula they did not put an end to it altogether. The large settlements at Katalimata and Katalimata ton Plakoton, both of which had basilicas, may well represent a period of rebuilding and reoccupation after the earthquakes, which ended when the population were forced to move by the Arab raids 300 years later.

Medieval Period

The characteristic feature of medieval settlement in Cyprus is the nucleated village. In the Akrotiri survey area most of the villages were located to the north of the salt lake on flat cultivable land. Episkopi and Kolossi, which stood just outside the survey area to the north, dominated the region and, located on either side of the Kouris River, they seemed to be the most advantageously located of the villages. Episkopi was by far the largest settlement during the medieval

period (Grivaud 1998: 451), and its role as bishop's seat after the abandonment of Kourion in the 7th century (Hill 1940: 269) would account, at least in part, for the convergence at the village of all the routes crossing the peninsula from the east. The population of Kolossi village was only about half that of Akrotiri (Grivaud 1998: 449, 451), but it stood at the centre of one of the most powerful estates on the island (Hill 1948: 698) whose income ensured its continued status and power.

Akrotiri, the only village to the south of the salt lake, was never in the same league as Episkopi or Kolossi, but it was an early medieval estate (Goodwin 1984) and far from the smallest settlement in the area (Grivaud 1998: 449, 451). That it survives to the present, despite being destroyed in the war of 1570 (Grivaud 1998: 380), is some testament to the suitability of its location or the expertise of its inhabitants in exploiting fairly meagre resources. Today there is a little cultivated land on the north facing slopes to the south of the salt lake; given its location this area may well have fallen into the purlieu of the monastery of Ayios Nikolaos, further reducing Akrotiri's sources of food or income. The sandy batha around the village was more suited to rough grazing than to cultivation and it may be that Akrotiri relied heavily upon pastoralism. Such medieval-modern pottery as I found in the south of the survey area all lay within 1500 m of Akrotiri village and, given the quality of the ground, it was unlikely to have been a manuring halo, but rather refuse dumped outside the village, or the detritus of herders and other workers in the landscape. Around SE0056 the pottery was perhaps discarded by shepherds using the underground chambers as *mandres*. A similar practice might account for the medieval rubbish recovered from one of the water cisterns at Akrotiri *Lania* (WSBAAS 1995: 9) as no evidence of

medieval occupation has been recorded at the settlement site 100 m to the southwest, and the chambers were certainly used to house goats in the 20th century (Last 1954).

In addition to sheep and goats, salt almost certainly played an important role in the economy of Akrotiri village. The lakes at Larnaka and Akrotiri were the two main sources of salt on the island and, according to travellers' accounts, so much of it was produced during the medieval period that they could not even export all surplus (e.g. Locke 1998; Montague 1998). The fortunes of the industry at Akrotiri appear to have been variable, as, whilst salt was still being gathered from the lake late in the 19th century (Enlart 1987: 349; Turner 1998: 162), production had dropped to such an extent by the mid 16th century that the lake had reverted to a fishery (Hill 1948: 814; Villamont 1908: 172) and was labelled *étang* or fishpond on several contemporary maps (e.g. Stylianou and Stylianou 1980: 400, 403). It may be that these apparent changes are due to the limited view of writers or cartographers visiting the region for only a short period. The two activities could have been complementary, seasonal exploitations of the salt lake; fish were caught when the lake was flooded in the winter, and salt gathered when it had dried out during the summer.

Two Venetian canals that joined the lake to the sea (Heywood 1982; Wessex 2002) might have been associated with the production of salt. At Larnaka the Venetians built channels to divert excess water away from the lake during the wet season, to prevent it from overflowing and not drying out completely during the summer as a consequence (Locke 1998: 8; Pococke 1998: 38). The eastern channel may also, or alternatively, have been the channel through which fish

entered the lake, seen by Villamont (1908) in 1589. This channel was 8 m wide and may equally have kept a navigable channel open to the sea for shallow draft vessels to enter the sheltered, albeit seasonal, safety of the salt lake as the eastern arm of the peninsula approached completion. Little is said of the western canal, but it has been suggested that it was part of a sugar transport system connecting inland refineries with deep water anchorages on the lake (Wessex 2002: 12). This is hard to imagine; the network of channels to the northwest (GS057), that continue the line of this canal, appear to be more associated with drainage.

If the economy of Akrotiri village relied heavily on herding and salt, the villages to the north concentrated on agriculture and cultivation. In the case of the large and powerful estates based at Episkopi and Kolossi much of their energy went into sugar production. Episkopi, Kolossi and Kouklia, near Pafos, were the three main centres of sugar production on Cyprus from the 13th to the 16th century, when the trade was ruined by competition from Madeira and the West Indies (Brigitte-Porée 1995; der Parthog 1994; Hill 1948: 816; von Wartburg 2001). In 1458 Count Gabrielle Capodilista remarked upon the many fields of sugar cane that he saw near Episkopi (Cobham 1908: 35), and in 1508 Martin von Baumgarten (2000: 191) described Kolossi as ‘famous for its abundant sugar.’ Whilst sugar production was a profitable business, it required a considerable financial investment to establish plantations and refineries, so it is not surprising that they were built at large centres of population and controlled by powerful families. Kouklia was initially run by the Lusignan Royal house, Episkopi by the Venetian Cornaro family, and Kolossi was owned by the Knights of Saint John (von Wartburg 2001). Refinery sites are characterised by vast quantities of broken sugar moulds, which numbered in their thousands at Kouklia (Gregory

1993: 172-173; von Wartburg 2001; Young 1982). The refineries at Episkopi and Kolossi were just outside the Akrotiri survey area, but it is likely that much of the land in the north of the area was used to grow sugar cane. The fact that no sugar moulds were identified in the pottery recorded in the fields suggests, perhaps not surprisingly, that this very specific type of pottery was seldom removed from the refinery sites.

Just as the privations of the peninsula rendered it unattractive to many in the medieval period, so others considered its isolation a virtue. The abandoned, 16th century proposal to build a fortified refuge at Akrotiri for the aristocracy from Nicosia (Hill 1948: 863; Jeffery 1983: 373) appears to have been solely concerned with defence and escape. For the network of watchtowers, small strongholds and signal stations built across the island during the second half of the 14th and into the 15th century (de Lusignan 2001; der Parthog 1994: 84; Hill 1948: 863) on the other hand communication was a vital part of their purpose despite their isolation. The foundations of the small, rectangular buildings recorded at Akrotiri *Vounaroudkhia ton Lamnion* and at Akrotiri *Phrakhtaes* may have been the remains of watchtowers (Last 1954). The former has since been ascribed to the Venetian period, possibly on the strength of its square plan (F. Garrod p.com; Wessex 2002).

In contrast to the physical remoteness perceived by the aristocrats of Nicosia, and actually experienced by any coastguards on the southern coast of the peninsula, the monastic establishments at Phasouri and Ayios Nikolaos seem to have espoused isolation whilst establishing themselves in far from remote locations.



Figure 4.21 Roman settlement concentration on the south of the peninsula, surviving villages to the north.

Whether consciously or not, the medieval buildings of the monastery of Ayios Nikolaos of the cats represent just one phase in the spiritual occupation of the

locality that has lasted for well over 2000 years. The current, rebuilt structures accompany the site into the 21st century, whilst the Roman pillars incorporated into the medieval cloister form a link back to a time when the Hellenistic-Roman sanctuary at Anthrobos (Last 1954) was active. Even after its desertion in the 16th century (Enlart 1987; Heywood 1982) the monastery was not forgotten; it appears on maps through to the present, and those produced in the 19th century (Kitchener 1882; Stylianou and Stylianou 1980) clearly show the road making a detour to pass by it. It seems unlikely that the way could have been kept open only by the efforts of the numerous travellers, from the 15th century onwards, who seem to have written of the monastery and the legend of its cats (e.g. in Cobham 1908; Martin 1998). The track might have survived if the ruined buildings were used as *mandres* as seems to happen to many abandoned structures in Cyprus, but none of the sources report this and, perhaps, the route past the monastery was maintained simply by the devotions of local inhabitants who continued to revere a sacred place.

The 12th century monastic establishment at Phasouri was occupied by members of the Stylos order who were apparently renowned for their tendency to retreat from the world (Wessex 2002: 11). Yet even if the locality was far less well-drained or accessible than it is today, Phasouri was not isolated. It sat on the road between Kolossi and Akrotiri, at a junction with the road from Zakaki and Asomatos, all of which were occupied during the medieval period. Perhaps Phasouri offered the chance for the order to remain enclosed and isolated within their establishment, whilst at the same time reminding all who passed through the three way junction of the power and works of the Church.

The road from Asomatos is a detour from the Roman coast road between Kourion and Amathous, but it is not clear when the detour was first established (Bekker-Nielsen 2004: 196; Wessex 2002). It would seem to take the obvious, shortest route for anyone travelling from the east toward Akrotiri village, before the eastern arm of the peninsula was complete. If this is the case, then the monastery, as well as the small medieval settlement at Phasouri (Grivaud 1998), may have been built at a junction in a road network that incorporated Roman routes, rather than, themselves, being the reason for the roads converging at this point. Given the Late Bronze Age settlement and cemetery recorded at Asomatos (Catling 1962), it might even be reasonable to suggest that the road's origins go still further back, and that the distribution of medieval settlement contains echoes of a pattern from more than 4000 years ago.

Ottoman Period

There is clear evidence for activity in the Akrotiri survey area during the Ottoman period, despite the dearth of pottery evidence on the ground. The few coarse sherds I found on the south of the peninsula were presumably the result of shepherds and others working in, or passing through, the batha. Similarly, the small amount recorded to the north was probably discarded by agricultural workers, or was the thin outer reaches of a manuring halo from one of the villages.

The overall settlement pattern remained largely unchanged into the 16th century, and, despite an Ottoman attack on the area in 1570, during which Akrotiri and Episkopi were destroyed, both they and all but one other of the recorded medieval settlements survive to the present. There were, however, a few notable

changes to the settlement pattern. The monastery of Saint Nicholas was abandoned soon after the invasion (Enlart 1987: 348; Villamont 1908), leaving Akrotiri, or its recuperating remains, as the only settlement south of the salt lake. Its inhabitants might have continued to collect salt from the lake, but by the 1880s its main industry was the manufacture of mats and other goods woven from rushes collected from the salt marshes (Goodwin 1984). The collapse of the sugar trade in the early 17th century (Hill 1948: 816) would have had a huge impact on Episkopi and Kolossi's income, but they, and the other settlements to the north of the salt lake, were surrounded by fertile ground that continued to be cultivated for citrus fruits and mulberry trees for silk worms (Pococke 1998: 50) as well as cotton, vines and cereals (Hill 1952).

The desertion of the landscape so often attributed to the Ottoman period is not evident in the Akrotiri survey area. The settlement at Phasouri is the only village that disappeared from the lists, but it changed form rather than vanished altogether. Phasouri does not appear in the 1825 tax records (Papadopoulos 1965: 117), and in the 1881 census it was recorded as a *chiftlik* with a population of seven (Grivaud 1998: 226). This might suggest that it was more closely associated with the monastic establishment in the locality (Wessex 2002: 11) than previously thought. If, like the monastery of Ayios Nikolaos (Enlart 1987), the Phasouri establishment was abandoned at the beginning of the Ottoman period, any associated settlement may also have been deserted. The whole area was swamp, unsuitable for extensive cultivation, and was only finally drained, according to Christos Tsimon, managing director of Phassouri Plantations, in the 1930s.

Given the unpromising ground conditions, it is perhaps surprising that another *chiftlik* was established at Cherkez, on the road between Asomatos and Zakaki. It did not appear in the records until 1881 and may tentatively be linked with the arrival of Circassian refugees from the Caucasus in the 1860s (Grivaud 1998: 235; Kyrris 1996: 292, 293). Kitchener (1882) shows a tight conglomeration of twelve houses at Cherkez *Chiftlik*, and what appears to be a church, but is presumably the mosque (SE0058). By contrast, an employee of Lanitis Farms, which now owns the land in the locality, told me that there had never been a village, that the refugees' houses had been scattered across the area. He also told me that all the refugees had died of malaria by the time any attempt was made to drain the swamp and reclaim the land. This, then, was a very short-lived settlement, established as a reaction to a sudden arrival of population, but with, the location would suggest, little thought or consideration for those that were to live there.

Community and Communications

Much has been written on maritime trade and communication routes in the Mediterranean in general, and Cyprus in particular (e.g. Karageorghis and Michaelides 1995; Manning and Hulin 2005; Manning *et al.* 2002; Swiny *et al.* 1997). The routes may not be visible to us, but there are harbours and anchorages around Akrotiri (Leidwanger 2004; forthcoming; Leonard 1997: 179) at which they could begin or end; at Dreamers Bay I found Late Roman material from Greece and Africa, whilst amongst the local wares found off the south and the west coast were items from Rhodes and the Levant (Leidwanger 2004; forthcoming). With the move of settlement inland the focus of sea communication moved too, to Larnaka and Famagusta. Lemesos must have been

the most convenient port for the sugar producers of Episkopi and Kolossi, but it remained small, overshadowed by the larger ports to the east, and only developed into a significant terminal during the second half of the 19th century (Aristidou 1995a: 265; 1995b: 273).

It is something of a paradox that as the salt lake was finally cut off from the sea with the closure of the peninsula's eastern arm, and the land to the south became more accessible, so it was abandoned and the need for north/south communications dwindled. The continuing presence of Akrotiri village meant that routes were kept open and the Venetian bridge (Wessex 2002) on the western arm of the peninsula was clearly a part of the effort, giving villagers access to the wider networks across the island.

Very few roads or tracks appear on maps of the area before the 19th century; earlier maps were generally drawn to a fairly small scale and were more concerned with representing the location of towns and churches than the task of navigating between them. It is possible that in periods when frequent long-distance travel was rare it was considered unnecessary to include large communication routes on the maps. Smaller, local routes, on the other hand, would have been used by local inhabitants who were familiar with their landscape and would have required no assistance to find their way from A to B. Oliva's map of 1638 (Stylianou and Stylianou 1980: 313) is one that does not include roads and yet it shows Akrotiri village, the monastery of Ayios Nikolaos and the church of S. Giorgi (Ayios Yeorgios), as well as a second, unlabelled, settlement that is possibly Katalimata ton Plakoton/Kourias, which must have had communication routes running to and between them. Roads might be expected to

have been of more note in the 19th century, but the only one shown by Graves, on his 1849 chart (Stylianou and Stylianou 1980: 408), runs down the eastern arm of the peninsula to the monastery before turning west toward Akrotiri village, which is not marked. This paucity of roads, and indeed settlement, does not necessarily reflect an absence of activity on the ground; Graves was producing a nautical chart, more concerned with the depth of the water than with terrestrial detail, which is sparse across the whole island. Graves' single road is included amongst those plotted by Kitchener (1882) who shows several tracks and paths linking the monastery, Akrotiri village and the lighthouse at Cape Gata to one another as well as the land north of the salt lake. Whilst I found no evidence of settlement on the south of the peninsula during the Ottoman period, the land was clearly well enough used for there to be a network of tracks sufficiently well established for Kitchener to consider mapping them.

In the north of the survey area there seems, as discussed in the medieval section above, to have been some continuity in the road network from the Roman to medieval period, which has continued to the present. Judging by the network shown by Kitchener (1882), there would appear to be a similar continuity in the south of the area. Kitchener's evidence reflects the situation at the end of the Ottoman period, but he did map a road from Akrotiri to the church of Ayios Yeorgios to the west of the village, which, with the survival of the road to the monastery of Ayios Nikolaos, suggest a continuity from the medieval period. In spite of the Byzantine gap the presence of the Hellenistic-Roman sanctuary close to the monastery, at Anthrobos (Last 1954), the road probably dates back even further. The surviving, and no doubt developing, communication network would have ensured that the abandoned settlements and other ancient sites on the

peninsula remained alive in the collective consciousness; Kitchener shows tracks that pass by, or through, several of Last's sites. Whilst these are by no means definite traces of a Roman communication system across the south of the survey area, it seems likely that they are vestigial traces of it. And many of the routes are still in use: some as tarmaced thoroughfares, some as gravel roads and some as rough tracks across the batha or along the coast.

There are several clear areas of focus for overlapping, imagined communities in the material evidence from the Akrotiri area, including the settlements, the professional occupation, and later the burial of their inhabitants, as well as the landscape itself. They are particularly evident during the Roman period. The nature of the landscape itself may have formed sufficiently discrete areas for a community bond to have developed amongst those who lived in the south of the peninsula in contrast to those in the north. During the Roman period the south of the peninsula was probably only tenuously joined to the mainland, further emphasising its difference; its inhabitants were probably mainly concerned with the operation and support of the numerous ports and harbours around the coast. It seems unlikely that the community in the south of the peninsula was self-sufficient and it probably on relied the farming community to the north that worked the coastal plains around Kourion. Given the seasonal nature of so much activity in pre-industrial societies it is entirely possible that there were those that were part of both communities at different times during the year.

There is a large amount of Roman burial evidence on the south of Akrotiri, which immediately highlights two social levels of community in the area: those that could afford rock-cut tombs or graves, and the professional grave diggers that

created them. The graves and tombs may have provided a focus for the whole community in the south, as reminders of past generations of occupants of the settlements, but they also emphasised a boundary that was important to the living. The cliffs along which most of the tombs were built, as well as forming a liminal zone between land and sea, represented an important area of focus to a community concerned with the operation of ports and harbours. By situating the burials along the cliff they not only, at a practical level, occupied an area that was of little practical use either for farming or for access to the sea, but also served to link areas of settlement, commerce and communication within the landscape.

The only burial evidence that I recorded away from the coast was at Shilastasia (SE0066) where the tomb entrances were on the edge of the occupied area. This could, as mentioned above, point to different burial practices being carried out at different times, but it could also indicate a different emphasis on the community identity. If the burials along the cliff line strengthened ties for a community whose professional focus was at some remove from its settlement, the location of burials so close to the settlement at Shilastasia could point toward different preoccupations for its inhabitants. It is possible that Shilastasia housed a predominantly agricultural community that worked in the immediate vicinity of the settlement. The location of the burials around the settlement is then a logical one as here too they would have formed a cohesive link between the community's living and working landscape.

Structural remains in the south suggest a settlement hierarchy not unlike that around Kalavassos *Kopetra* in the Vasilikos valley (Rautman 2003: 237-238), which in turn implies an associated hierarchy of socially based communities. The

remains of basilicas, and fragments of mosaic and marble that have been found at the two largest settlements, Katalimata and Katalimata ton Plakoton (GS068; GS074; GS075; Last 1954; Wessex 2002), suggest that with size came a degree of wealth and social complexity. Smaller settlements, such as the farmsteads, that were focused on a single activity would have featured much lower down in any local hierarchy. Shilastasia appears to have been about half the size of the two largest settlements (Last 1954), but the tombs associated with it and the suggestion of a curved wall that could have been an apse imply that it was by no means the least important settlement on the peninsula. It is, of course, possible that the larger settlements appear more important to us now simply because of the sheer bulk of material that has survived, and without considerably more, intensive study to throw light onto the precise nature of the settlements, the hierarchy must remain an assumption

A hierarchy of both settlement and community is visible amongst the medieval villages of the area. The three with the largest populations of *francoti* in 1565 were, perhaps unsurprisingly, the three estates: Akrotiri, Episkopi and Kolossi (Grivaud 1998). Size of population would not have been the sole factor by which the communities judged one another. Akrotiri was home to twice as many *francoti* as Kolossi, but Kolossi, the headquarters of the Knights of Saint John and the Grand Commandery, was by far the wealthier and, probably, dominant in any perceived hierarchy of the time.

The changes in land ownership at the beginning of the Ottoman period probably had little impact on the wider, existing social structure as Venetian landlords were, in many cases, simply replaced by their Turkish successors (Christodoulou

1959: 72; Hill 1952: 21; Karouzis 1977: 29). No doubt adjustments were necessary, but communities focused on the villages, their size or the occupation of their inhabitants would, presumably, have been similar to those that preceded the regime change. The population dropped drastically after the Ottoman invasion and continued to decline until the middle of the 18th century (Chapter 7; Christodoulou 1959: 51; Hill 1952: 34; Papadopoulos 1965: 36, 78, flyleaf), but the community remained a powerful binding force. It remained important for Cypriots to belong to a village community, but perhaps of necessity not one to which they had previously belonged, as the population decreased and centres of population changed or shifted. As the decreasing population came together in the more successful villages so a more dispersed pattern of settlement made up of fewer, but at least viable, nucleated elements was created. As a matter of pure speculation we can imagine small communities within the surviving villages who still considered that they belonged to their former, lost village in much the same way as many Greek Cypriots today refer to their villages in the inaccessible northern part of the island.

The Changing Peninsula

Some of the larger changes to have affected the Akrotiri survey area took place in the 20th century, and they have had a mixed impact upon our ability to assess the level and distribution of past settlement in the area. The expanding villages and the construction of new, larger roads, the draining of the swamps, the cultivation of the land, and the construction of RAF Akrotiri have all had a major impact upon the landscape. Eucalyptus plantations on reclaimed swampland block views that would, in the past, have linked areas of habitation or activity. Citrus groves and wheat fields open up large areas of land in which the soil is frequently turned

over, but the cultivation is so intense little more remains of any settlement that might once have occupied them, other than small, scattered sherds. The RAF base has covered much of the south of the peninsula in tarmac and concrete, but its multiple layers of fencing have also preserved swathes of maquis and batha, and the archaeology within them, almost untouched, for the last fifty years.

Between the Roman period and the end of Ottoman rule the changes were just as significant, affecting patterns of settlement, the inhabitants' exploitation of the landscape, and even the landscape itself. Whilst we may assume that the western arm of the peninsula was fully formed by the 4th century A.D., the eastern arm was not; it built up slowly over the following millennium or so until the salt lake was completely cut off from the sea. The northward shift of population, as well as being prompted by earthquake, Arab raids and the Ottoman invasion would no doubt have been influenced by economic factors. If what is now the salt lake had hitherto served as a sheltered anchorage or port, then its final isolation from the sea would have greatly reduced any local income derived from trade or support services associated with the waterfront. Although there was a port at Lemesos it remained small until the end of the 19th century (Aristidou 1995b: 273) and could not have compensated for the economic impact the loss of the harbours and ports around the peninsula would have had on the local economy.

If the considerable Hellenistic-Roman evidence was concentrated in the very south of the survey area because the settlements' main role was the operation and support of the harbours and anchorages along the peninsula's coast, then clearly this marine traffic had disappeared by the medieval period. Perhaps the northward shift of settlement was prompted by Arab raids between the 7th and

10th centuries (Hill 1940), but it may also reflect a growing reliance on the production of cash crops such as the sugar and wine enterprises at Episkopi and Kolossi. If any of the medieval villages were particularly involved in the harvesting of salt from the lake, then Akrotiri and Asomatos are the most likely candidates; they are certainly the closest and the lake is divided between the two modern village territories. The changing nature of the lake will have affected the influence it exerted upon the life of the inhabitants of the Akrotiri survey area, which may be reflected in the extent to which they exploited it, whether as a harbour, a fishpond, or a source of salt or reeds.

The Hellenistic-Roman period saw a considerable population on the south of the peninsula, and even if the settlements were not all occupied concurrently, the plentiful pottery evidence speaks of the widespread use of the area over some six centuries. The north of the survey area must also have been inhabited at this time; despite the lack of structural evidence there was a consistent presence of Hellenistic-Roman pottery on the ground. Given the size and dominance of Kourion it seems likely that any other settlements in the north were small, perhaps no more than farmsteads, like those found by the Sotira Archaeological Project Survey (Swiny and Mavromatis 2000). As reliance on maritime activity decreased, so the northern part of the survey area, the large areas of cultivable land, became important, and it was here that the medieval villages were established, perhaps on previously occupied sites. In this era Kolossi and Episkopi were dominant and the varying numbers of *francomati* recorded in each village (Grivaud 1998) clearly show that a settlement hierarchy still existed. The pattern remained much the same into the Ottoman period, but perhaps we can see in the two *chiftliks* the beginnings of a move back southward that was given an

extra boost in the 1930s with the draining and cultivation of the low lying swamp land close to the salt lake.

In my discussion of north/south shifts of settlement I have omitted one important element; Akrotiri seems to have been a constant factor throughout. There is some suggestion that it was the site of a Roman settlement (Wessex 2002); it is recorded as being the seat of an early medieval estate (Goodwin 1984), it was destroyed in 1570 (Grivaud 1998: 380; Hill 1952: 959), and yet it still survives today. It has persisted despite the shifting populations around it because of its location. It sits conveniently between three exploitable areas: the salt lake, cultivable land for agriculture and the batha for grazing. Its mixed economy would have made it more resilient to changes in fortune such as the end of shipping on the lake, or the end of salt production. It was at a transitional point, not just amongst its natural resources, but also at the entrance to the peninsula. Such traffic as went to and from the monastery of Ayios Nikolaos during the medieval period would almost certainly have gone through the village, as would such produce from the land in the south that left the peninsula. By exploiting its location and making changes in its economy to encompass shipping on the lake, the shift of population from the south to the north, the changing fortunes of salt production on the lake and, in the 20th century, the exclusion of goats from the forest and the construction of an RAF base, Akrotiri village has remained a constant feature in the landscape of the Akrotiri survey area.

5 The Nikitari Survey Area

The Nikitari survey area, lying southeast of Morphou Bay, less than 10 km from the coast, encompassed the village territory of Nikitari, for which it was named. The territory could be seen as having a head, neck, shoulders and body.

The head was on the plain, the neck where the territory narrows at GS036, the shoulders around Nikitari village and into the foothills, whilst the body, the largest portion, comprised the valley as it climbs into the mountains.



The drainages of the Argaki ton Rotson (Stream of Rocks) and, lower down, the Asinou Potamos occupied most of the area's 44 km²; the Rotson becomes the Asinou when it is joined by the Khandakias Potamos, just southwest of the church of Panayia Phorviotissa near the middle of the valley. The survey area broadened out in the north, abandoning the narrowing drainage and incorporating an area of flat, agricultural land. Approximately 60% of the survey area, to the south, lay within the Adelphi Forest boundary, which runs close to the 400 m contour, some 1.5 km southwest of Nikitari village. There is also an enclave within in the state forest toward the middle of the valley, around the church of Panayia Phorviotissa.

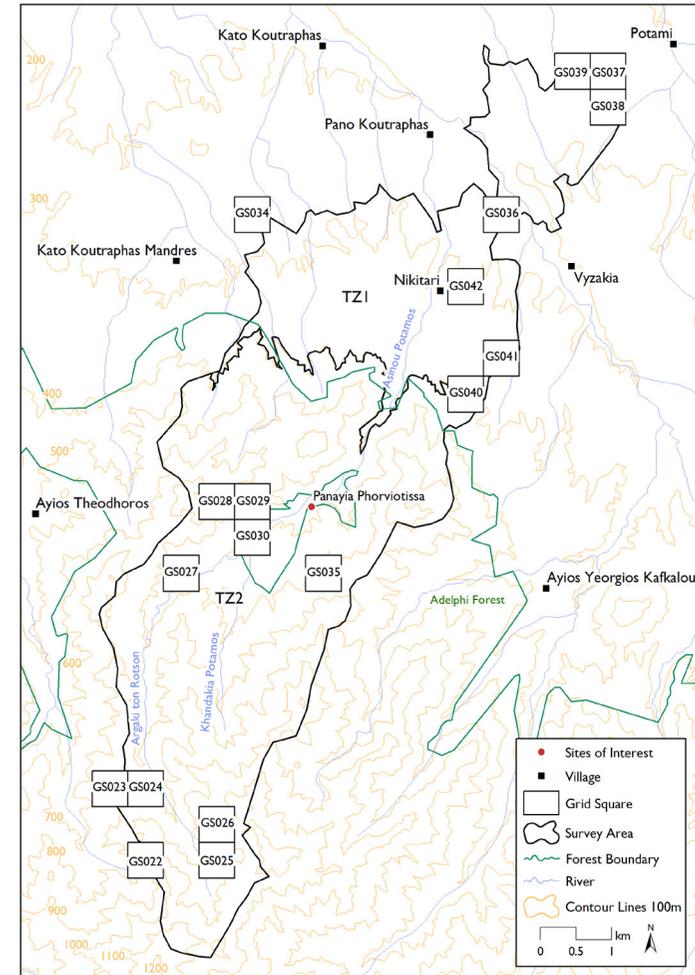


Figure 5.1 The Nikitari Survey Area.

The Nikitari area was designed to incorporate a cross section of land that climbed from the south of the Mesaoria plain, up through foothills and pillow lavas into the Troodos mountain range. I initially intended to survey just the valley, a discrete element defined by river drainages, but when I expanded the area to the north, to incorporate more plain, the line came so close to the Nikitari village boundary that I adopted it as the survey area boundary. This allowed the possibility of some comparison between current bureaucratic boundaries and those boundaries or limitations identified through study of settlement on the ground.

More than simply completing the topographical cross-section by incorporating a portion of the Mesaoria, I was interested to see if any connections could be made between the settlement and occupation of the upper valley with that on the lower ground. Similarly, the decision to include the mountains was not solely dictated by topographical considerations. Archaeologists working in Cyprus have unjustly neglected the mountains in the past, and very little work has been undertaken in them, often on the grounds that there is nothing of interest to be found there. There are, of course, exceptions; Ellis Burnet (2004) and the Troodos Archaeological and Environmental Survey Project (TAESP) (Given *et al.* 2002) consciously incorporated mountain areas into their survey area. These, as well as anecdotal evidence and the evidence of my own eyes, convinced me that the upper reaches of the Rotson drainage would be fertile ground for study.

Apart from a small part in the south, the Nikitari survey area falls within the purlieu of TAESP's area. In 2001 and 2002 they found Roman, Medieval and Ottoman pottery in the area around the church of Panayia Phorvriotissa as well as

structural evidence further up the valley (Given 2002b; Given *et al.* 2002); a 'Phoenician necropolis' was apparently discovered nearby in 1885 (Jeffery 1983: 284), but there seems to be little evidence for this. By working in similar areas to TAESP, and in some cases surveying the same ground, both projects have benefited from the other's perspective and from their combined data. I have also been able to compare the methods and results of a solo archaeologist with those of a well-staffed, interdisciplinary survey project, and to consider the different views of a landscape that these produce.

The Nikitari Survey Area was divided into two topographical zones (TZ) for survey:

- TZ1: land below 400 m a.s.l. lying outside the forest boundary, incorporating the lower pillow lavas of the Troodos mountains, and plain as the Asinou river flowed toward the Ilea.
- TZ2: land above 400 m a.s.l., which climbs through the foothills into the Troodos mountains. Most of this zone lay within the Adelphi Forest.

Vegetation and ground cover varied in the Nikitari survey area, from cereals in the north to thick pine forest in the south, and very little of it was truly natural. TZ1 was, after the final steps of the foothills, dominated by agriculture and horticulture. Much of the ground was covered by large fields of wheat, harvested to acres of stubble by the time of my survey. Elsewhere, cultivated almond trees were plentiful, and olives, citrus trees and vegetable plots were common. Also common, throughout the survey area, were *mosphilo*, terebinth, spiny burnet and capers. There were still signs of animal husbandry in the shoulders of the survey

area, which ranged from occasional, small-scale pens of mixed livestock, and at least one small flock of sheep, to the large, almost industrial scale of the ostrich and pig farms in the northwest of the area.

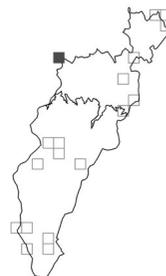
In TZ2 the ground was, with the exception of the forest enclave around Asinou, covered in forest. The ubiquitous pine trees (*Pinus brutia*) were almost entirely the work of the Forestry Department, and were often planted on deep, bulldozed terraces. *Cistus* thrived beneath the pines, although where the canopy was more open grass replaced it as the dominant undergrowth. Above about 700 m a.s.l. golden oak became common; in the past they were often coppiced and burnt for charcoal (Thirgood 1987: 117). Another plant limited to the higher ground, where it grew beneath the pines, was milk vetch, a low growing plant with large seed-pods that rattle when they dry out. Myrtle favoured gullies in the mountain where water ran, if not constantly then for at least part of the year. They were often accompanied by inula, although this also seemed to thrive on the higher slopes.

5.1 Grid Squares and Settlement Evidence

Data were collected in the Nikitari area in 18 grid squares, GS022-GS030 and GS034-GS042; seven in TZ1 and eleven in TZ2. They are grouped here by topographical zone and presented in numerical order. It was interesting to see some distinct clusters of squares in this randomly selected sample. This meant that certain parts of the survey area – for example the transition from mountain to plain in the northwest – were sadly neglected, but it did mean better coverage of the ground around the clusters.

5.1.1 Topographical Zone One – TZ1

GS034



Nikitari TZ1
496500 / 3882000
23 & 26/ix/03

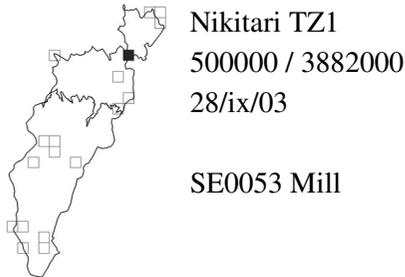
A broad, shallow depression ran down the slope across this square from southeast to northwest, toward the main road, beyond which rose Koronia, topped with National Guard post. Stubble fields covered the depression and a shallow, dry gully ran along either side of it. In the northeast corner of the square stood a large-scale, modern pig farm with an olive grove stood to its west; in the southeast was an ostrich farm. To the south and east of the ostrich farm was a small collection of olive and fig trees, whilst to its west the fields were ploughed. The remainder of the square, outside of the depression, was mainly covered in rough grass and in the east of the square, out on the edge of the broad shallow depression the ground began to roll with sparsely covered, low outcrops of weathered pillow lavas.

To the east of the square was a thick patch of jujube (8 x 8 m) on a slightly steeper pocket of land between two areas of stubble. There was no sign of any construction around the patch, but the shrubs were so thick as to hide anything

that might have been underneath them. It is possible that these plants grow up on patches that are not regularly cultivated, but the lack of cultivation is not necessarily an indication of structural remains.

There was a low level of pottery across the whole square; the heaviest concentration was in the southwest, no doubt due in part to the ploughing. Quantities fell off toward the east where the soil was thinner over the pillow lavas and much of the ground had been disturbed by the construction of the pig farm. The pottery, much of it of coarse, pinkish or red fabrics, was very worn and unidentifiable. One piece had a faint red circle pattern, which may well indicate a date in the Hellenistic period.

GS036



Two dry gullies crossed this square, from southwest to northeast, to join the Vyzakia Potamos. Between the two gullies a hard-packed gravel road ran from Nikitari to Potami; access to the fields on either side was along tracks of a similar quality. Overall the ground was relatively flat, although sloping gently down to the river in the north, beyond which the ground rose steeply. To the east and west

it was bounded by rising ground – to the south too, but this was less noticeable due to the gentle, local slope and the more spectacular rise of the Troodos rearing up behind it (Figure 5.2).

Agriculture dominated in this square, and the ground between the gullies was taken up with ploughed fields, stubble and potatoes, olive groves, almonds and vegetable patches. Some of the plots were fenced, occasionally with barbed wire and in one place razor wire, both of which were unusual. There were also two enclosures of animals toward the south of the square, one in the west and one, just outside, in the east. These were small-scale, mixed collections of livestock: pigeons, ducks, chickens, turkeys and pigs. Inside the western enclosure was a row of olive trees, perhaps 100 years old.

Along the gullies the ground tended to be rough and untended. In the north of the square, the western gully was very wide and its edges stepped in broad, deep terraces, some of which were recently cut, and all of which were under cultivation of some sort: cereal, almonds or olives. On the north side the gully was being used as a tip for builders' waste. Toward the southern end of the southern gully the ground rose rather more gently than elsewhere along its length, over shallower, but still broad, older terraces held in place by big dry-stone walls, made largely of river boulder.

The meagre sprinkling of pottery in this square was generally, but not exclusively, found in the ploughed fields. A small amount might have dated to before the 12th century, including the stub of a flat, rimmed tile. Some glazed, 19th century sherds were also found, but most material dated to between the 16th

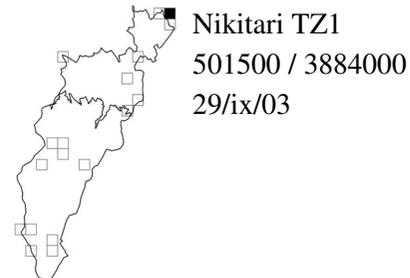
and 20th centuries. Fabrics ranged from coarse to fine and some of the vessels might have been slipped.



Figure 5.2 GS036 from the north. The mouth of the Asinou Valley is visible in the background.

Just outside the square to the north, standing on the Vyzakia Potamos at Nikitari *Lambridhia*, was a ruined mill (SE0053, BU0073). Only the leat and penstock survived and these were solidly constructed from basalt blocks and mortar. The leat was 23 m long and ran east to west; it stood 1 m high at its eastern end and was 5-6 m tall where it joined the penstock. The penstock measured approximately 4 x 4 m and its 1.3 m diameter bore was lined with plaster or cement. Both penstock and leat showed signs of rough plastering on the north side. There was a built base, just to north of penstock, on the edge of the river, which could represent the remains of the mill house. It was no longer clear where the water supply for the mill would have come from.

GS037



This square lay on the Potami Prairie, where big, modern fields of stubble reflected the sun's heat and light, making survey very hard work. Loose straw on the ground in many places further reduced the already poor surface visibility associated with stubble fields. The square sat across the broadening end of a shallow spur that ran north from Nikitari. The slope, and two gullies, one to the south east of the spur and the other starting close to the middle of the square, ran

southwest to northeast. Potami lay northeast of the square, to the east of the mouth of the eastern gully, and south of rising ground; on rising ground to the northeast and to the south of the village stood several modern *mandres*.

In the west of the square was a small patch of horticulture. In the north, toward the middle of the square was a recently dug drainage ditch/field boundary; in the section topsoil was only about 0.5 m deep – it was rich red/brown and quite stony (Figure 5.3).



Figure 5.3 Drainage ditch showing depth of topsoil.

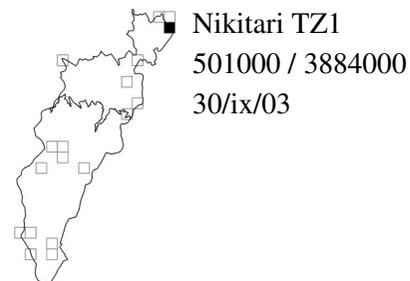
There were two modern features in the square; both were part of the east/west line of defences that still runs across the Mesaoria. In the southeast was a block-built, metal-doored, military bunker built into the side of a gully, facing west. Near to the middle of the square was a three-sided bank – an abandoned tank emplacement; the number of shotgun cartridges on the ground inside it attested to its continued use, albeit in a slightly different role to that originally intended.

Within the large modern fields were old, ignored field-boundaries: broken lines of big stones or a shallow step change in the ground level. None of them seemed to impede modern machinery despite the size of some of the rocks incorporated into them.

Amongst the stubble and what ploughed soil there was, were basalt blocks, often with deceiving right angles in two planes, and a 5 mm thick white layer on their surfaces, that had every appearance of discarded building fragments. They were not; this was a natural deposit of calcium, which only builds up on those stones or parts or stones that lie in the subsoil – between 0.5 and 1 m below the surface – so these stones must have been dug out, possibly disturbed by deeper, modern ploughing methods.

Just one piece of pottery was recorded in the whole square – in the southwest – a handle fragment from a Cypriot transport amphora with horizontal handles, which were current from the Iron Age to the Classical period – the first half of the first millennium B.C.

GS038

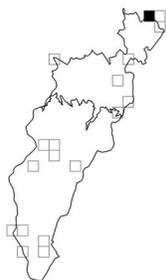


This square was, on the whole, flat and covered in stubble fields with baled and loose straw on the ground; especially bad ground visibility was added to the difficulties of reflected heat and sunlight. The road between Nikitari and Potami ran across the square, between two gullies. To the east a deep gully ran southwest

to northeast, the wheat fields above it gave way to olive groves at various stages of establishment further down its sides. Parts of the northwest side stepped down in large, modern terraces, none of which were cultivated. Another, small gully began near the centre of the square and ran to the northeast. Toward the west of the square were market gardening plots, which provided the only patches of clear earth in the square.

One or two rough, fist-sized, spherical grinders, possibly dating to the Bronze Age were noted toward the west of the square. These were similar to the example photographed in GS039.

GS039



Nikipari TZ1
501500 / 3883500
29/ix/03

Gullies ran, south to north, along either side of this square, and a third, parallel gully, began near its centre. The road from Vyzakia to the main, Nicosia road ran between the two eastern gullies. Away from the gullies the ground was flat and largely taken up with rolling wheat fields, where loose straw was still lying on top of the stubble. Elsewhere wild oats were thick on the ground. Two areas offered slightly better ground visibility: to the west of the road on a patch of

ploughed ground where rows of green barley were growing up through lines of decaying *patikha*, and toward the middle of the square, an olive grove ran from the east of the road down to the gully.



Figure 5.4 Four views of a spherical grinding stone (GS039), possibly Bronze Age.

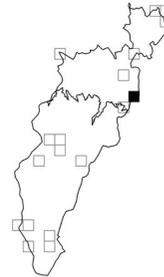
In the west of the square, toward the middle, two large patches of jujube, about 6 m in diameter, grew on the moderate, west facing slope of the gully side,

amongst the stubble some 10-20 m up from the bottom. Large, random, irregular basalt blocks lay in and around the bushes, and were probably no more than patches of field clearance, but it was impossible to be certain – the bushes were so impenetrable. In the northeast corner of the square a check dam had been built across the gully. Made from unworked basalt blocks, most of them river-worn, it was 11 m wide east/west and 0.8 m high at centre. The ground sloping gently up behind it was covered in stubble. This was the only check dam I saw in this vicinity.

In the side of the middle gully was the entrance to an underground bunker, and near the centre of the square a tank emplacement with its open end facing south, both were very similar to examples recorded in GS037.

Very little material culture was recorded in this square; the stubble and loose straw reduced ground visibility, and the effect of the red soil on scraps of limestone made for considerable background confusion. Northwest of the centre of the square was a spherical grinder (Figure 5.4), similar to examples found in GS037 and GS038, possibly dating to the Bronze Age. TAESP also found considerable quantities of ground and chipped stone in the vicinity (TP095; Given 2002b).

GS041



Nikitari TZ1

500000 / 3880000

1/x/03

A wide, steep-sided gully entered the square in the southwest corner. It was possible to scramble across the gully until it turned north and became narrower and steeper, near the middle of the square. To either side of the gully the land was cultivated – some narrow, modern, bulldozed terraces with a mix of almonds and pines in the southeast and gentler, sloping stubble fields and rough patches, interrupted by the odd pillow or two of lava in most of the remainder of the square. A large, fenced citrus grove overlapped the square in the north.

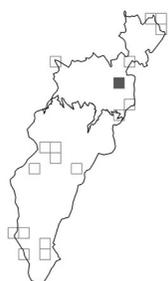
In the southeast of the square, amongst the almonds stood a lone domestic olive, about 130 years old.

Near the centre of the square, above a natural step – 3-4 m high – in the gully, was a rough check dam, standing about 0.5 m high.

In a 3 m wide, ploughed strip along the fence of the citrus grove were several pieces of pottery. Some of the pottery was Hellenistic to Roman – at least one cooking ware handle fragment was identified, but all the pieces were small and

very worn. In the northwest of the square was a large nodule of red jasper, about 0.3 m long. There were plenty of smaller pieces in the square, but there were no obvious signs of any of the stones being worked as there might have been had the jasper been used as a source for *doukhani* blades, or other tools.

GS042



Nikitari TZ1
499500 / 3881000
2/x & 8/xi/03

SE0067 Threshing Floors

This square overlapped the eastern edge of Nikitari village. A newly upgraded road, which eases the approach of coaches to the church at Asinou cut deep into the slope as it ran east/west across the square.

South of the road, in the east, were stubble fields and some small terraces planted with almonds. In the west, the ground dipped down into a broad gully and here the ground was divided between a ploughed field and the cemetery. North of the road, shallow, broad terraces with almonds and olives along the tops of the risers stepped down the side of the gully. Nearer the bottom of the gully, where the ground was flatter, some of the terraces were broad enough to be stubble fields.

Near the centre of the square a knoll stood above the west side of the gully. On its top was built a house and along its eastern flank modern, abandoned animal-pens. At its foot, in the south, was a feed mill, and in the north a bank of abandoned, pottery beehives.

On the western side of the knoll, a line of threshing floors (SE0067, Figure 5.5) followed the contour around, just above the flat ground close to the southeast margin of the village at Nikitari *Konstantoudhaes*. Some were more visible than others; the positions of two were inferred from large, lone trees (a eucalyptus and a pine) that presumably once stood on the edge of the threshing floors to provide shade. The trees now stood on the north edge of a broad, deep, ploughed, modern terrace. The extant floors were approximately 14 m in diameter, a typical diameter for a village, family threshing floor. They were defined by low retaining walls up- and downslope. Two showed patchy signs of paving with river boulders and each had a shade tree on its southern side. The third was fully, if randomly paved; its shade tree had not survived. Between the knoll and the rising ground of the village a broad, flat gully, headed north and veered west, channelling the breeze up from Morphou Bay to the threshing floors. It was pleasing to find that the threshing floors have survived as more than a mark on the cadastral plan, particularly as their line was picked out by the surviving pine and eucalyptus. The cadastral plan shows another line of threshing floors along the northwest margin of Nikitari village.

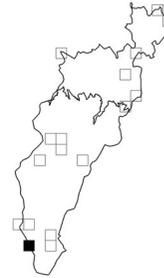


Figure 5.5 Threshing floors, a eucalyptus shade tree stands on the edge of each (SE0067).

In the field below the threshing floors was a large lump of red jasper approximately 0.2 m across – there were no obvious signs that it had been worked, but it would have been an ideal source for *doukhani* blades. A few scattered sherds, most of them rough and worn, were also found here, they included Medieval to modern, coarse ware with combed patterns and a small amount of sgraffito from the 15th or 16th century.

5.1.2 Topographical Zone Two – TZ2

GS022



Nikitari TZ2

495000 / 3873000

29-30/v & 1-3/vi/03

SE0071 Church

SE0072 Structure

SE0073 Structure

Only a small portion of this square, in the northeast, fell within the Nikitari village boundary, in the drainage of the Argaki ton Rotson; the majority fell in Ayios Theodoros village territory on the upper reaches of the Argaki tou Pterikiou's drainage, which ran northward to the Kourdhali. This gave the steep gullies and ridges that covered the square an overall westerly aspect. The view from the top of the ridge in the northeast of the square was extensive, but a uniform cover of pine trees hid the ridges and roads that might have provided orientation in the landscape. Amongst the pine trees were plenty of golden oak, and some clumps of terebinth, whilst below them grew cistus and milk vetch. The ground underfoot was mostly loose, crumbling basalt, topped with a slippery layer of dead pine needles.

The square was crossed by numerous overgrown and derelict paths, which tended to follow a gully, a ridge or a contour. Some of these would have allowed vehicular access and were probably the work of the Forestry Department, but



Figure 5.6 GS022 - Grid square map.

none of them had been recently used. A check dam had been constructed across a gully in the southwest of the square, just above the road; the rough dry-stone construction was 2-3 m long and 1.5 m high. This could also have been the work of the Forestry Department, or equally a remnant of earlier exploitation of the

area; the slope around it was covered in well-established pines and the road below it seldom used.

In the south of the square stood a ruined structure (SE0073, Figure 5.7) measuring approximately 3 x 2 m. The slope above the wall was forested with pine and golden oak; below the track the trees were a little more open, but of the same mix. Beneath the overgrowth were the ubiquitous cistus and vetch. Two surviving walls of rough, unworked basalt chunks with no chinking or bonding stood to about 1 m on a step in a spur that was, if not caused by, then accentuated by a now-abandoned forest track. The angle between the walls was approximately 90 degrees, but it was not sharply defined. These were probably the remains of a rudimentary, temporary shelter, rather than a permanent structure; nothing is marked on any of the maps at this point. The rough track running downslope (west) of the structure petered out some 50 m to the north, at a low retaining wall on the sheer, deep gully's edge. This wall was a rough dry-stone construction about 0.5 m tall and its angle enclosed about 2.5 x 1.5 m. It too was surrounded by vetch, cistus, pine and golden oak.

On a small spur, running west from a track in the northeast of the square toward the Argakin tou Phterikitou at Ayios Theodoros *Laxia tou Kathiliki*, were three ruined, dry-stone buildings. The spur was covered with widely spaced pines, whilst underfoot were cistus, vetch and long grass. One building (SE0071), which lay in a slight saddle just before the end of the spur, was identified as a church. It measured some 5 x 3 m and was aligned along the length of the spur, close to east/west. There were few distinct signs of structure, but sufficient to identify one long wall and one curved wall at the eastern end. The structure's

location, close to the end of a spur, its east/west alignment and the apsoidal wall were all indicative of it being a small church.

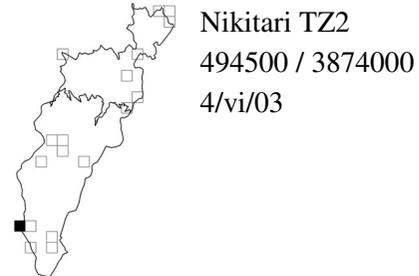


Figure 5.7 Lakxia tou Kathiliki (SE0071) all but obscured by cistus and vetch.

Some 50 m up the spur, to the east were more ruins (SE0072), which may have represented two rooms each measuring approximately 3 x 4 m or two contiguous structures. These buildings stood just below a rough forest road and some 400 m west of the watershed marking the boundary between the villages of Ayios Theodoros and Nikitari. Little structure survived, most of the outline was indicated by rectangular depressions, but five courses of stone along one long wall turned, at a distinct corner into a short wall running southwest.

No structures are marked on the maps in this area, but they do show several paths running both along, and up and down the slope, which suggest that in the past, this has been a well-frequented spot – an ideal situation for a church.

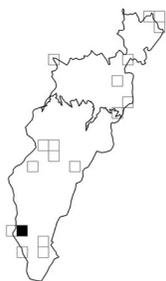
GS023



In the northeast of this square a summit, with a spot height of 868 m, stood between the drainages of the Kourdhalı, to the west, and the Argaki ton Rotson, to the east. Radiating from the summit were five, steep-sided ridges; the overall aspect of the square was westerly. A forest road ran around the summit between the 750 m and 800 m contour, passing through the west of the square. On the

summit, amongst the *mosphilo* bushes was a small patch of concrete, 0.2 m across, surrounded by a circle of stones – probably a surveying station. No settlement evidence was identified in this square.

GS024



Nikitari TZ2
495000 / 3874000
5/vi/03

This square on the upper reaches of the Argaki ton Rotson was one of steep, sheer-sided gullies, their slopes covered in pine, golden oak, cistus, vetch and asphodel. The Rotson itself had water in it, but the gullies, whilst part of the drainage, were dry. Roads and tracks looped through the square, running along the contours. There were signs of bulldozing on the tops of the ridges and, of course, on the roads. In places outcrops of basalt, decaying and splitting into regular blocks, looked uncannily like dry-stone constructions.

Just north of the square, at the tip of a spur that ran down to the junction of the Rotson and a side gully, a very small piece of rough, dry-stone wall had been built – it was covered in moss and sat about 4 m above the water level. About 100 m to the south was a similar feature, which might have been natural. Sitting on top of this one was a single, coarse sherd of Ottoman to modern burnished

ware. One other piece of pottery was found; in the southwest of the square a single, very worn red sherd lay on the forest road, in the wash of a gully. It had no finish on its soft, porous exterior face, and was completely unidentifiable.

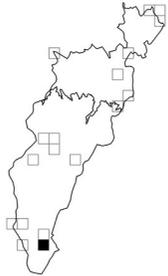


Figure 5.8 Retaining Wall on spur.

A derelict path ran along the east, upslope side of the Rotson, below the current forestry road, which presumably replaced it; at least two stretches of retaining wall visible from the west side of the river gully defined the line of the path. This path probably runs down right next to the river across from the basalt outcrop mentioned above.

In the extreme west of the square, toward the middle, just upslope of the road a short, rough check dam spanned a slight gully; this could have been the work of the Forestry Department, but as with all these constructions, dating is problematic.

GS025



Nikitari TZ2
496000 / 3873000
6-7/vi/03

SE0029 Ruined structure
SE0030 Ruined structure
SE0086 Enclosure

The Argaki ton Rotson, flanked by thick undergrowth above a short, sheer, rocky drop on the east and a higher cliff on the west, ran through the southern half of the western edge of this square. The 1:50,000 map marks a track cutting across the northwest corner of the square and running down to the river. A short stretch of this was still extant, but it had mostly been superseded by larger, forestry roads that followed the contours rather than spurs and ridgelines as the older track had done. The cadastral plan shows a track following the east bank of the Argaki ton Rotson; most of this had been lost to a combination of vegetation, downslope toward the river, and, upslope, to a more recent, rough track, but a small stretch of it was still clear below the modern track at SE0029. Several other tracks and roads, old and new, crossed the square, moving north/south along contour lines and east/west along gullies and spurs (Figure 5.13). Away from the roads and the river the steep hill-slopes were covered in loose basalt and dead pine needles, an unfruitful and precarious surface on which to work.

Amongst the open forest on the nose of a shallow spur running east/west down to the Rotson, in the southwest of the square were the ruins of an L-shaped building

(SE0030, Figure 5.9) built from basalt blocks. Distinct rectangular depressions and cuts into the slope were bordered by overgrown banks of rock, but there were few clear signs of constructed walls. Thick patches of tumble on the gentle slopes to the south and west were the remains of further construction. They abutted the

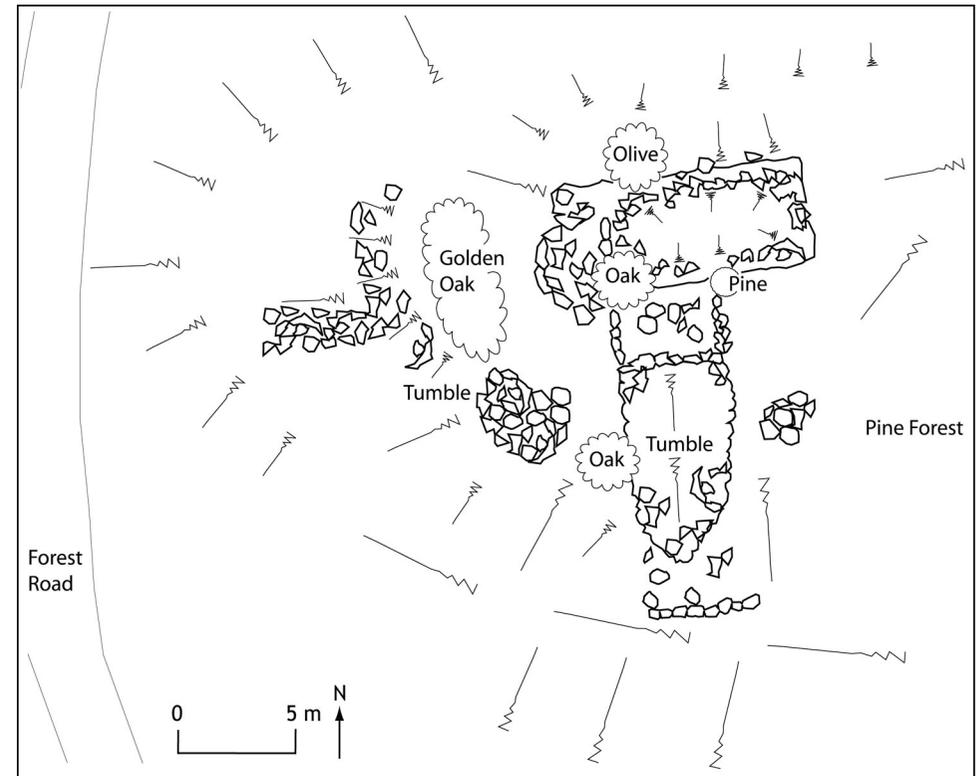


Figure 5.9 Mandres ton Rotson (SE0030) sketch plan.

main structure and had indistinct signs of a wall at their southern end, and possibly long walls running north/south. Ten to fifteen metres down from the main building were indistinct signs of a terrace or retaining wall running across the spur.

A considerable amount of coarse pottery fragments were found amongst the tumbled structure; Roman tile and burnished fragments of Medieval or Ottoman to modern frying pan were most common. A forestry cut had grazed the south side of the spur and several finer pieces of pottery, possibly Late Hellenistic to Roman, were found in the section.

Three or four domestic olives stood nearby the structure and a broad, flat gully, suitable for cultivation, ran to its south. At least one of the olive trees was about 300 years old and patches of rhizocarpon indicate that the tumbled structure had been undisturbed for 200 years or more.

South of SE0030, just outside the square, on a moderate slope above the road that ran parallel to the Rotson was a ruined enclosure (SE0086, Figure 5.10). The rough, dry-stone, sub-rectangular (17 x 6 m) construction of unworked basalt blocks was cut into the slope, which had also been flattened above the enclosure. Its back wall was built up to about 0.5 m, but did not survive above ground level. The short, side walls had almost completely collapsed; the north wall was straight, the south wall curved. There was no sign of a wall on the west (downslope) side, although there was a slight hint of a step down toward the north end.



Figure 5.10 The only enclosure identified in the mountains (SE0086).

The flat area on which the enclosure was built continued for some 12 m to the south where there was some suggestion of a retaining wall, possibly representing a rectangular structure of similar width to the enclosure. The flat area ended as the derelict track just below it headed south around the contour. The only material culture was a small glass Stemma shoe-cream jar with a rusting, screw cap. This brand is still available today, but the raised lettering on the jar's base probably dates it to no later than the middle of the 20th century.

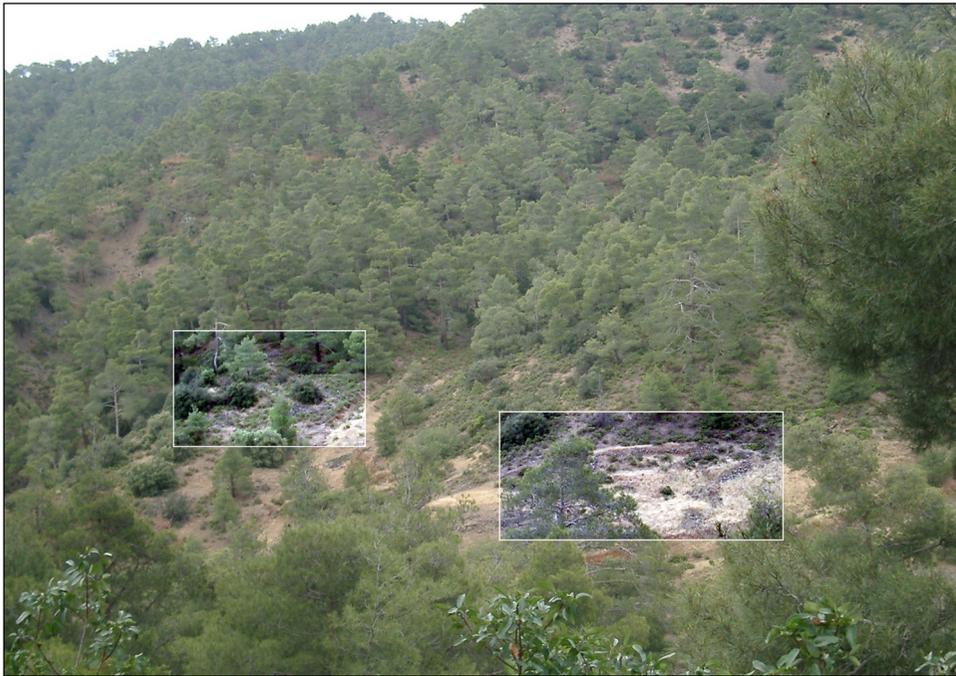


Figure 5.11 Mandres ton Rotson (SE0030, SE0086) from the west.

The cadastral plan has two sheepfolds marked to the south of the square, one to the west of the river and one to the east. The sheepfold to the west of the river was not located. To the east of the river, it appears to be the enclosure (SE0086), rather than the structure (SE0030), that is marked on the plan. This suggests that even if the two were constructed at the same time it was the enclosure that had the longer life. And whilst there were some signs of rebuilding at the enclosure, there was no clear evidence of reuse of the structure.

In the west of the square, at Nikitari *Khalospita*, on the south flank of a small low spur running east/west, enclosed in a hairpin bend in the road above the upper reaches of the Rotson was another ruined structure (SE0029). The locality name means ruined houses. The spur was covered in the pine, cistus and asphodel of open forest, to its east the ground climbed steeply up Muti ton Kaliphon to the watershed, 900 m to the east, which marked the Nikitari village boundary. At the summit of Kaliphon four village territories meet: Nikitari, Ayios Yeorgios Kaphkalo, Kannavia and Ayia Irini. SE0029 sat near a junction of at least four tracks and roads, all now rough or derelict. Below the road that bordered the spur on which SE0029 sat was a short, but wide (approximately 1 m) stretch of derelict track; to the south it followed the contour of the slope toward Mandres ton Rotson, but soon disappeared under the more recent road. The path, marked on the cadastral plan, running beside the river was also apparent, defined by stretches of retaining wall made from large stones and river boulders.

The most obvious remains at Khalospita were two rooms, each measuring 7 x 4 m; they were very broken down and filled with rubble, but the wall lines were still clear. The walls were of unworked basalt blocks and in places included pottery chinking, most notably in a rough, retaining wall along the cut of the road (Figure 5.12). Amongst the rubble, and in the road that cut its southern edge, was a large amount of coarse pottery; the remains of several storage pithoi, hand made utility vessels, some finer ware and at least one sgraffito bowl. The pottery was mostly Medieval to modern, but with very little later Ottoman material. Toward the nose of the spur, away from the rubble, were depressions that defined at least four rooms; in this area were found fragments of Roman roof and cover tiles. There were, it seems, two distinct phases of construction at Khalospita; a

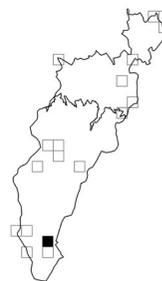
Roman structure on the end of the low spur and a medieval replacement a few metres up the slope. No doubt the convergence of tracks and paths at a convenient river crossing made this a favourable position to live and work, no matter what the period.



Figure 5.12 Khalospita (SE0029) – chinking in retaining wall along road-cut.

Amongst the pottery were numerous, big pieces of reddish orange storage vessels, also pithos fragments and some smaller fragments of coarse wares that could date to any time since the Ottoman period.

GS026



Nikitari TZ2

496000 / 3873500

9/vi/03

SE0070 Settlement

This square was dominated by a single spur running across it from southeast to northwest. Relatively little of the ground was actually walked, but the spurs and gullies were so steep sided that each side was plainly visible from the other, and, equally plainly, unlikely to be host to any anthropogenic remains. Nevertheless the ground had clearly seen human activity in the past. The 1:50,000 topographical map marked, amongst others, a track running along the back of the spur to the church of Ayia Paraskevi, 300 m east of the square. This track was unclear on the ground and another leaving it near the middle of the square to head south was not identified (Figure 5.13).

In 2002 a cluster of structural remains (SE0070) was noted some 400 m to the north of GS026, and revisited in 2004. They sat in the saddle of an east/west spur on the east side of the valley at Nikitari *Lakxia tou Agrioklimatou*, amongst the

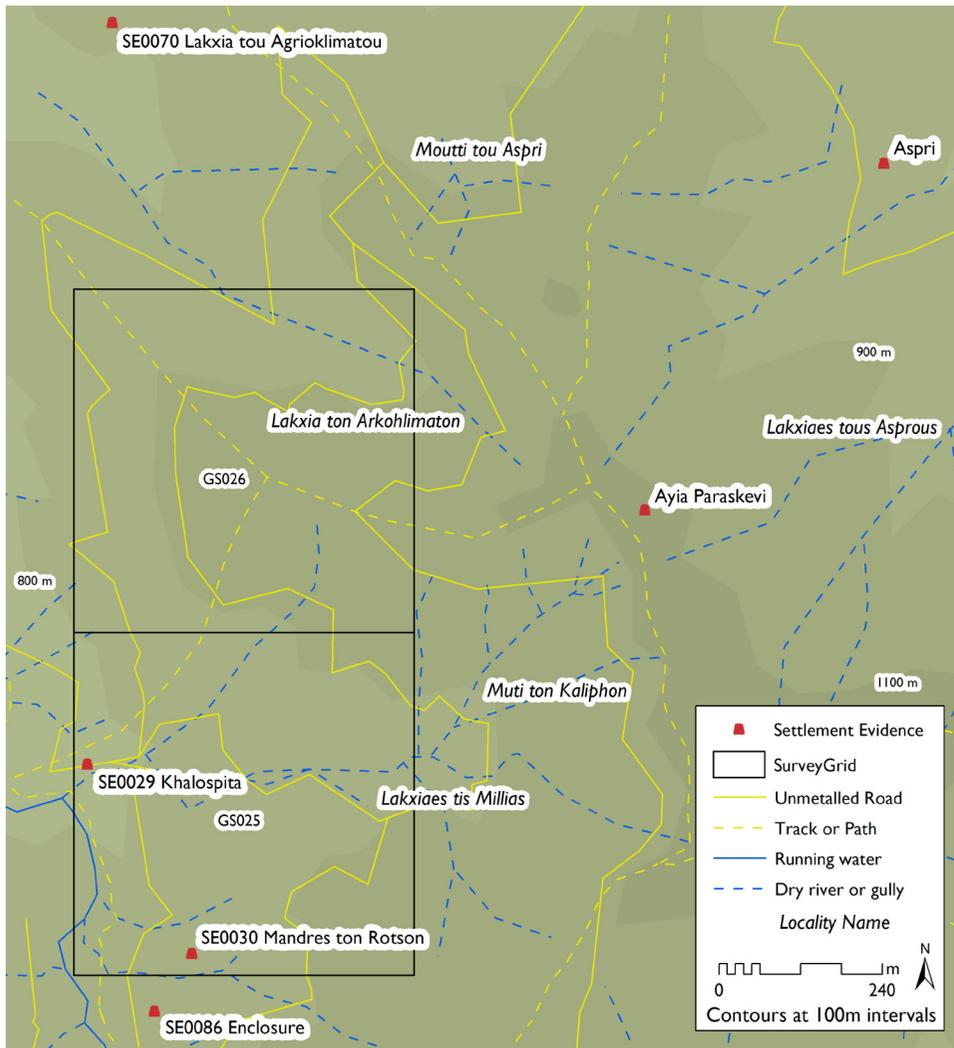


Figure 5.13 GS025 and GS026 and environs.

typical forest vegetation of pine, golden oak, terebinth, hawthorn, cistus and spiny burnet (Figure 5.14). Ground cover consisted primarily of thick, dead grass but there were also plentiful thistles and some members of the alium family. The pottery evidence was unclear; it included late Medieval or Ottoman to modern storage pithoi, Kornos and tableware.

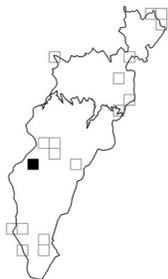
There was a large complex of ruined structures and one or two separate, but not significantly isolated, buildings. Most of the remains were built on seven strip terraces on the south-facing flank of the spur; few walls survived and the buildings were mostly apparent as roughly rectangular depressions. It was hard to tell how many structures made up the settlement, but twenty or so rooms comprising eight to ten structures is a reasonable estimate. In one structure roughly built from unworked blocks three or four corners survived and it is, possible that a gap in one wall was more entrance than tumble. The stretches of wall that did survive ranged from an example where it seemed that rough blocks had simply been pushed into line, through an old wall standing to three or four courses with well-established patches of rhizocarpon, to a stretch of newer, chinked wall whose blocks were free from lichen. This range was indicative of more than one phase of construction, and at least one, more recent phase of destruction. Rough terracing and cuts for tracks had exposed new rock, mixing it with that already on the surface and the plentiful tumble from natural stone outcropping, creating a confusing mixture of rock, cuts and partial structures. Above the structures seven more strip terraces stepped up to the high point of the spur, and throughout the settlement were dotted small, pocket terraces. The strip settlements appeared to be associated with the structures, whilst the pockets were perhaps later constructions.



Figure 5.14 Lakxia tou Agrioklimatou (SE0070) - south-facing strip-terracing and ruined structures. Scale is approximately 2 m tall.

Toward the western end of SE0070, on the edge of what could have been a low, stone-built revetment, stood a clump of relatively small olive stems – the largest was about 0.2 m. They were probably suckers from a now rotted trunk of which there were some vestigial remains. It was impossible to take any accurate

measurements, but it is not unreasonable to suspect that this olive tree was at least 300 years old.

GS027

Nikitari TZ2
495500 / 3877000
10-12/vi/03

SE0031 Well
SE0032 Oven and Ruins
SE0068 Structures

The Argaki ton Rotson crossed this square from southwest to northeast, and a tributary to it grazed the eastern half of the northern edge. Thick patches of myrtle grew along both, although only the main river was flowing. Much of the square was crossed by broad gullies and spurs running northwest/southeast down toward the river. The forest was very open, although the pines grew more densely down by the river. Beneath the trees the undergrowth consisted mainly of cistus where they grew closely together, and sparse, dead, wild oats where they were more widely spaced.

The footpath between Asinou and Ayios Theodoros ran across the northeast corner of the square; it had recently been refurbished by the Forestry Department for public, recreational use. In addition to the current roads through the square there were several fragments of track on both sides of the river, some of which were more derelict than others, and some of which made up part of the route between Asinou and Spilia. It would seem that several routes came together,

particularly from the north, to ford the river, which is easily accessible in this area.

In the northwest of the square, small spurs above the road were covered with patches of loose basalt and decaying outcrops that often looked temptingly like scattered and ruined masonry. On the south bank of the Rotson, toward the middle of the square, a long oval mound of rubble lay between track and river. It included some suggestion of walls and edges, and there were some sub-rectangular indentations amongst the trees nearby. On balance, it was probably just the result of the combined disturbance of road making and river spate, rather than another settlement.

In the east of the square were two SERFs (SE0031 and SE0032), initially identified on the cadastral plan and eventually located on the ground. A well (SE0031) was taken to have been on a small flat area between the modern track and an angle in the Rotson, close to the point where the cadastral plan shows a track crossing the river. A hole right beside the river, with some stone in its sides, could have been the remains of a formal well, but could equally have been eroded by the river in spate. Several large myrtle bushes, which favour damp ground, might also have hidden the mouth of a well.

The track that crossed the river at the well then climbed the west bank and looped past the ruins of an oven, which with the structural remains at Nikitari *Pykroathasoudhi* comprised SE0032. They lay on the moderate slope of a shallow spur that ran down toward the Rotson between two gullies. The slope

became steep just beyond the oven; two or three courses of basalt blocks were visible with some stone chinking. There was possibly some mud bonding, but this could simply have been soil that had accumulated since the oven fell into disuse, as could the slightly raised mound in the angle of the track on which it sat. The oven was smothered in pine needles and could almost have been mistaken for a lopsided revetment around the large pine that grew out of its northeast edge; its proximity to the buildings suggest that it was a domestic bread oven, rather than a mislabelled pitch kiln.

Upslope, to the northwest of the oven were two or three shallow, flattened areas cut out of the slope around which were scattered stone blocks, some of which were quite large. It is possible that these might have formed part of a rudimentary socle that stood on the flattened areas, the remainder presumably being built with mud brick. One possible wall-edge and corner was visible, but it was very short and only one course of stone.

The path up from the river ran on past the oven to join the footpath between Asinou and Ayios Theodoros footpath, crossing a small check dam to do so. There were several other long flat stretches of ground around SE0032 that could have been overgrown paths or shallow terracing.

The 1:50,000 topographical map marks a church – Ayios Yeorgios – approximately 100 m south of the southwest corner of this square. Nothing, however, is marked on the cadastral plan, and there was no obvious evidence on the ground. I suspect that this is a mapping error; and refers to the church of

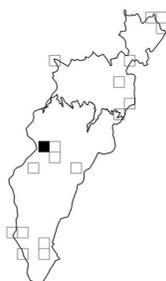
Ayios Yeorgios on the north bank of the Rotson, situated opposite the settlement ruins at Nikitari *Mandres tous Jerenides*, some 600 m further upstream to the south.

Some 900 m to the southeast of GS027, at Nikitari *Khandakia*, were the remains of three or four structures (SE0068). They stood below the modern road, in open forest, surrounded by pine and an occasional golden oak, near the nose of a shallow spur that sloped gently to the northwest, toward the Khandakia Potamos. One or two of the pines grew within the structures and terebinth grew along the wall lines where rhizocarpon grew on some of the stones. The ground around them was covered with cistus and asphodel, growing up through the thick carpet of pine needles.

The structures were in an advanced state of disrepair, in some cases surviving as little more than rectangular depressions. The extant walls were of dry-stone construction with stone chinking between their unworked basalt blocks. There were three structures grouped together, approximately 15 m northwest of a single building upslope. This single structure was cut into the slope on the side of the spur and there was a considerable amount of tumble from collapsed walls in and around the depression. It is possible that the group of three could be considered as a single structure; two of them were contiguous, although the third was only joined to them by one corner. Both upslope and downslope of the group of three there were signs of terracing across the spur; at least two levels of retaining wall across the nose of the spur formed a narrow, flat band below the structures in the

northwest, whilst two shallow steps in the spur were indicative of terracing above them.

GS028



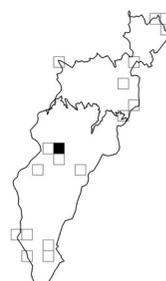
Nikitari TZ2
496000 / 3878000
13/vi/03

This square fell on the eastern flank of Moutti tou Dhia, covering several spurs and steep gullies that radiated out from its summit. It was steep, awkward and all but sterile due to the almost complete coverage of forestry terracing and pine trees rather than solely the extreme topography. The pines on the northern slopes were more densely and more recently planted – most trunks were approximately 0.2 m in diameter at the base, those on the south side were at least twice that size, with some very old, senescent specimens amongst them. At the summit of Moutti tou Dhia, in the west of the square, toward the north, the vegetation was more natural than on the slopes, and included capers and a self-seeded, wild olive.

A forest road ran to the north of Moutti tou Dhia and a modern track wound up to the summit from it. It was rough and very steep, and had a day or so before my visit proved hard work even for a large four-wheel drive vehicle. West of the

summit the track continued as a footpath along the ridge, following a gentle downward slope. On the very disturbed surface of the track up to the summit was a very pale fragment of twisted handle from a pre-Medieval amphora. It was completely out of context and had no sign of a surface finish.

GS029



Nikitari TZ2
496500 / 3878000
14/vi/03

This square lay on the lower, eastern slopes of Moutti tou Dhia, a spur descending from the summit divided to run south and east, near the middle of the square. Those slopes that were accessible were covered in very open pine, those that were not – generally in the northern half of the square – were more thickly planted.

A forestry road cut across the southeast corner of the square, following the contours. To the northeast it ran on to Ayios Theodoros and, by a rougher cut down to Asinou. To the south, it ran up the east side of the Argaki ton Rotson. Just downslope of the forestry road, a path ran parallel to its course, and along this, slightly further downslope ran the state forest boundary, marked by white-



Figure 5.15 Masonry forest cairn and pine tree with resin-tapping scar.

along the river itself.

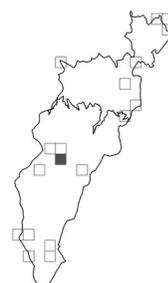
On the line of the current forest boundary, close to cairn number 35 were the remains of a masonry forest cairn, a predecessor of the white concrete models. It was 0.75 m in diameter, 0.5 m tall, and had been built on a shallow spur below the road. It was made from unworked basalt chunks with some stone chinking

painted concrete cairns. This boundary marked an enclave around the abandoned village of Asinou and environs, rather than the outside edge of the forest.

Below the road the slopes became less steep down toward the Argaki ton Rotson; wide-spaced pines still grew on them, although in one place, beyond the forest boundary, almonds grew in lines and in another, domestic olives had been planted in a modern cut. In the very southeast of the square the ground flattened out completely and here a narrow field of stubble was squeezed between the foot of the slope and the river. Lush vegetation including bamboo, trees and thick grass grew

and, possibly, mud bonding. There were signs of concrete at its core under a thin earth layer. Some of these older forest cairns were coated with lime-plaster and white washed; no traces of such treatment remained on this example. A few metres downslope, outside of the forest, was a pine tree with a resin-tapping Y-cut scar in its bark; these cuts are more usually simple vertical slots.

GS030



Nikitari TZ2

496500 / 3877500

15-16/vi, 22/ix/03

SE0033 Settlement

SE0034 Structure

The Argaki ton Rotson, running from southwest to northeast, cut this square in half, and the forest boundary, running approximately north/south, enclosed about 40% of it in the west. Within the forest open pine plantation dominated on both sides of the river, whilst outside its boundary there was more variety. One forest road cut across the northwest corner of the square and another ran beside the river on its southern side.

In the southwest of the square, the slope to the river was less severe and trees came right down to its north bank. In this area a rudimentary concrete dam had been built across the river at the narrow exit of a gully with steep sides of basalt,

just before the Rotson was joined by the Khandakia. Water from the dam appeared to be feeding into irrigation pipes, or possibly into a concrete water tank a little further down stream.

About 100 m below the dam the footpath between Asinou and Ayios Theodoros forded the river; this route is known to have been used regularly into the 20th century, although when it was established is unclear. This whole area is still criss-crossed by a profusion of roads, tracks, paths and their remains, which is perhaps not surprising given the presence of at least one village, three churches and a monastery all within about 1 km².

In the east of the square between the thick, lush vegetation on the south bank of the river and the road the ground was terraced and cultivated with cereals, vegetables and almonds. Above the road the ground was terraced, but less well tended; pine with cistus undergrowth was more in evidence, although there were still one or two patches of almond trees. In the southeast the ground was taken up with stubble fields, and rough ground cut by abandoned military trenches.

From the north gullies and spurs ran down toward the Argaki ton Rotson, stopping short of it with steep drops down to its margins. At the end of one of these, toward the middle of the square, amongst largely abandoned terracing at Nikitari *Pera Yitonia* sat the ruined remains of a settlement (SE0033, Figure 5.16, recorded by TAESP as TP061). The spur was broad with a moderate slope and a southeasterly aspect. According to local informant Panayiotis Alexandrou Loppas these buildings formed part of Asinou village, the larger portion of which lay to the east, on the far side of the river. Approaching from the southwest on a track

that ran just below the current forest road, crossing spurs as they came out of the main slope and dipping back up to cross gullies, the buildings remained hidden until the path turned a final corner and opened out onto the terraced end of the spur.

The boundaries of the settlement were clearly defined by the surrounding topography. Above the buildings the spur climbed steeply westward toward the road and the main slope of the valley. Below the buildings the spur dropped sheerly toward the river – some of this area had been terraced in the past and several large almonds grew there. To the north of the buildings, at the edge of the spur, the ground became confused in a collection of small spurs and gullies; there were many small check dams in the gullies and retaining walls, often only one or two courses high, on the spurs. There was also some modern terracing below this area, planted with almond, olive and fig, presumably associated with the modern construction built at the foot of the next spur to the north, below SE0034. A track ran along the gully to the north, passed the modern building, and continued down to cross the river and up the far side to join the current forest road to the east of the Asinou Potamos. There is a ford marked on the cadastral plan at this point. Below SE0033 a foot track was visible running southward up the edge of the gully on the far side of the river.

There were at least three well-spaced, complex structures on the spur, in varying states of repair – ranging from derelict to completely ruined. The long axes of the structures were aligned northeast/southwest across the spur, so that the long sides

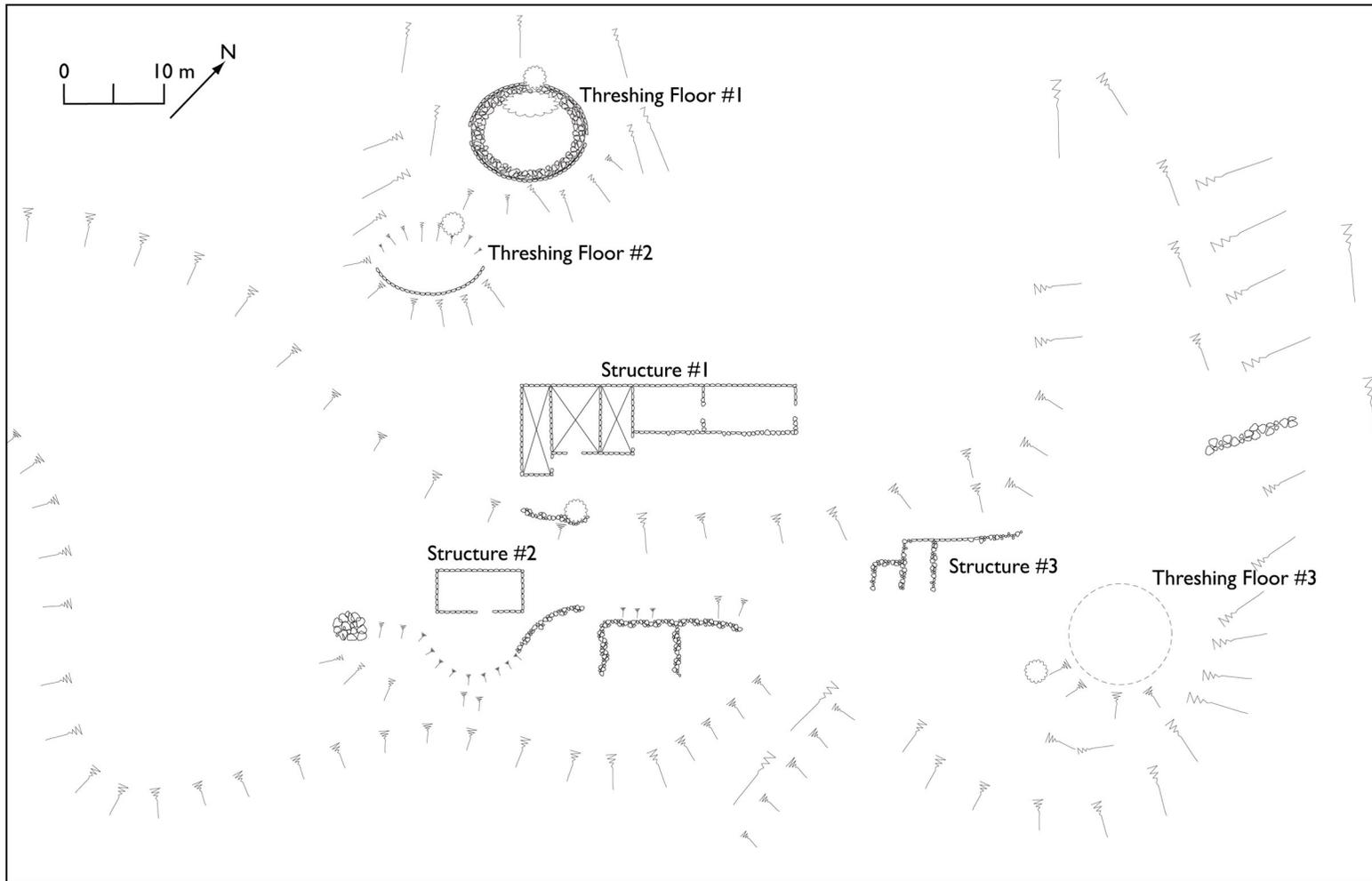


Figure 5.16 Pera Yitonia (SE0033) - sketch plan.

of the buildings faced southeast, across the valley. Terraced areas between the structures ran along the contour and in places were divided up and down the slope. At least three threshing floors were identified – two northwest of Structure #1 and one southeast of Structure #3.

Structure #1 stood 2 m tall at the front, but was cut into the slope and protruded less than 0.5 m above ground level at rear. It consisted of 5 units or rooms (1.1 to 1.5 from west to east), all were stone-built, but some to a higher standard than others. Much of the wood used in the structure had been machined, although most of the roof timbers were roughly hand-worked. A 3 m wide terraced area with a low retaining wall ran in front of structure #1 along its long, southeastern, downslope side.

Room 1.1 had mud brick walls above a stone socle, of river boulders, and a layer of corrugated iron over a bamboo and mud roof. Its most recent function would appear to have been as an animal pen – there was a trough at the upslope end – but a fireplace and chimney at the door end suggested human occupation prior to that. A triangular window was set in southeast (long) wall.

Room 1.2 was stone built of river boulders with mud bonding and a lot of coarse pottery and stone chinking. The walls were approximately 0.7 m thick and it had a similar roof to room 1.1 of corrugated iron on bamboo and mud. An internal wall made from flattened oil drums ran along its length and the door faced out, downslope through its long wall. A door in its northeast wall, which it shared with room 1.3 was blocked with stone and mud brick and almost entirely covered with mud plaster.

Room 1.3 was of similar construction to 1.2, but probably built at a later date; its walls were butted against those of its neighbour, rather than tied into them. Presumably the door between the two rooms was blocked at the time of this extension – the fill was more visible from room 1.3 and consisted mainly of mud brick. This room contained abundant detritus left by the last occupants: furniture, including a chair made from a packing case from Glasgow; nails spilled on the floor; a door bolt; enamel bowls; shelves, one made from two odd pieces of wood simply nailed together in the middle and fixed across the filled in door. There was a fireplace and chimney in the southeast corner of the room.

Rooms 1.4 and 1.5 had stone walls built to the same standard as the other three rooms, but there were no signs that they had ever been roofed, nor any remains of fireplaces or chimneys, nor any material culture inside them. They too had, perhaps been used as animal pens. Clearly structure #1 was occupied at different levels, with the rooms being put to different uses at different times during its occupation.

Structure #2 was built to a similar standard as structure #1. Its stone walls with chinking and mud bonding survived to roof level, or possibly just below, although the centre of the back wall had tumbled in. No sign of the roof had survived. The walls stood 2 m high at the front, but only a little above ground level at the rear. There were no windows in the walls, but alcoves were built into them on the inside. To the east and west of structure #2 terraced areas were cut into the slope, their downslope edge marked by the break in slope of the spur; the largest of them measured approximately 7 x 8 m. They were divided up and

down the slope by lines of loose rubble or surface clearance and were perhaps arable plots rather than animal pens.

Structure #3 stood on the same level as structure #2. It was very ruined, but three units/rooms were identified (3.1 to 3.3 west to east). The back wall was built of basalt blocks and the standard of construction seemed better toward the centre – some chinking had been used in room 3.2. The dividing walls were little more than linear piles of rubble. It perhaps represented two habitation rooms and a pen, although room 3.3 (the pen) might simply have been a flat area below an extended back/retaining wall.

Threshing floor #1, approximately 10 m in diameter, was cut into hill slope, above structure #1. Retaining walls upslope and downslope were made from rough basalt blocks and the floor was paved with basalt blocks and river boulders, but apparently only for a 1.5-2 m band around the outside. The floor appeared elliptical in plan, possibly due to the young pine and cistus growing on the back third or so. A large, senescent pine tree grew above the upslope retaining wall.

Threshing floor #2, about 10 m in diameter, was located just downslope of threshing floor #1. It was far less distinct than #1 due to soil-slump across its upslope half. A retaining wall was built around its downslope side and, again, a large, senescent pine tree grew on its upslope edge.

Threshing floor #3 was also indistinct, but appeared to protrude out from the northern edge of the spur to the northwest of structure #3.

The Nikitari Survey Area



Figure 5.17 Baked and melted clay - possible kiln material (SE0033)

degrees or above – would suggest a kiln or furnace; given its location, a pottery kiln seems most likely.

Structure #1 would appear to have been the most recently occupied structure at SE0033, and evidence of rooms 1.2 and 1.3 would suggest that it was abandoned during the second half of the 20th century. The construction of structures #1 and #2 is similar and the Ottoman pottery used as chinking indicates a date no earlier than the 14th century. The pottery found beside the path confirms an Ottoman date. Structure three is less well made than the other two, but whether this denotes an earlier phase of occupation or a later less permanent one is not clear.

The pottery used as chinking in the structures' walls was all common household forms of Ottoman to modern coarse ware. The only other pottery found at SE0033 was a patch of sherds weathering out of the cut of the path just to the southwest of the buildings; it included Ottoman, and possibly medieval, utility wares. Also in this spot were a few pieces of baked clay, which were very crumbly with some globules on at least one surface. The temperatures required to melt the clay and produce such globules – 1000

On the spur to the north of SE0033 stood another ruined stone structure (SE0034). It was located at the bottom of a moderate slope, facing southeast, covered in wild oats and planted with well-established almonds. Hawthorn, jujube and thistles grew around the building itself. Below the structure the ground sloped steeply down to the river and the southwest of the spur had been planted with olives on newly cut ground. The olives were probably associated with the modern building, built below the nose of the spur, which appeared to be occupied only at the weekend; it was locked up and deserted during the week. This modern building was not visible from SE0034.

SE0034 was a large, two-roomed structure measuring approximately 20 x 4 m overall. Its double-skin walls were built from rough basalt blocks with stone and pottery chinking, and mud bonding. There was a lot of pottery chinking, much of which was fragments of pithoi that could date to any time since the Ottoman period, late 16th century (Figure 5.18). The similarities in construction suggested that it was contemporary with structures #1 and #2 at SE0033.

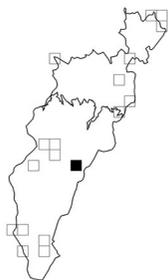
The remains of unworked roof timbers lay in the body of the building, and hand worked lintels spanned the door and surviving window. The rear wall lined the cut of the building's into the slope, but the internal height at the back of the building (1.5 m) and the surviving end wall in the north suggest that it originally stood about 0.5 m higher. The ground immediately around the structure was flattened or terraced and a low terrace wall ran in front of the southern room approximately 1 m from the building. A pile of rocks at the southern end of this wall was probably just that, the result of field clearance, although it was tempting to identify an oven in an advanced state of decay. Despite their proximity

SE0033 and SE0034 were not visible one from the other, but there were clear views from both across to the other part of Asinou village to the east, and northeast to the church of Panayia Phorviotissa.



Figure 5.18 View to the northeast through the door at Pera Yitonia (SE0034). Note pottery chinking in wall.

GS035



Nikitari TZ2
497500 / 3877000
27/ix/03

This square was full of deep gullies and steep spurs running southeast to northwest; they were covered in pine and golden oak. There was just one small, flatter area in the west, near the middle of the square where the trees were a little wider spaced and the ground covered in cistus. One forest road crossed the square from north to south, and another cut, briefly into its west side. Neither of these was marked on the 1:50,000 or the cadastral, although the former did join the line of a road marked on the cadastral in the very north of the square.

The cadastral plan shows several paths and roads in the north of the square, and a particular concentration in the northeast quadrant where routes from Ayios Yeorgios Kaphkalo and Spilia in the west run either side of a spur and cross just west of its highpoint, at Nikitari *Palaeolinos*. Beyond this they continue along separate branches of the now divided spur and follow different routes toward Asinou. Clearly, in the past, there were far more routes in and out of the valley than are used today.

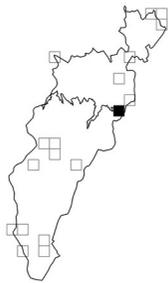
Two short stretches of abandoned, rough retaining wall were identified toward the end of spurs, on both sides of the road in the southeast of the square. Both were of dry-stone construction, using rough basalt blocks, and both were covered in moss, and grey and white lichen. Some 40 m upslope from the southerly wall a short stretch of terrace wall made from rough, lichen-covered blocks was almost submerged in moss, pine needles and soil-creep. It stretched approximately 8 m across slope and stood 0.5 m tall at the middle.



Figure 5.19 Small-scale cultivation in the mountains – pocket check dam or retaining wall.

These pieces of wall were impossible to date, but it seems likely that they represent small-scale cultivation rather than forestry land-conservation, which tended to consist of check dams across gullies. In which case these walls pre-date the establishment of the state forest in the late 19th century. They indicated land use, rather than settlement perhaps, but did suggest that the area was exploited over a long enough period to warrant investing the effort required to establish and then cultivate these patches.

GS040



Nikitari TZ2
499500 / 3879500
30/ix & 1/x/03

SE0054 Church

A deep gully cut across this square, which straddled the boundary between TZ1 and TZ2. The transition was clear on the ground as the mountains to the southeast of the square gave way to a rolling mixture of small spurs and gullies at the bottom edge of the Troodos pillow lavas. Some of the spurs had a deep covering of topsoil, whilst others were almost bare rock. The square lay outside the forest boundary, but nevertheless open forest vegetation dominated; pines grew above cistus, spiny burnet, thyme and caper, whilst underfoot the surface was obscured by dried grass and thick pine needles. In the southeast of the square, south of the gully, the land became flatter still and was cultivated; initially there were stubble

fields, dotted with almond trees, and then tall modern terraces planted with well-established almonds, as the ground sloped into another gully to the south.

Particularly near to the gully and especially near to the middle of the square it was noticeable that a good proportion of the loose stones on the ground were green, or had a greenish tinge; the Troodos pillow lavas have always been a rich source of copper. At right angles to the south side of the gully there was a natural cut through some of this greenish rock. The rock was naturally breaking down into regular blocks, but there was not a large amount of tumbled rock in the bottom of the gully, so it is possible that material had been removed for construction work, even if not for mineral extraction.

Near the middle of the square a low, broken-down retaining wall ran along the break in slope above the north side of the gully. It was made from rough basalt blocks and appeared to be augmenting a natural outcrop or step in the slope. White and yellowish lichen grew on the rocks, except in places newly exposed by collapse. Some 200 m to the west, a short piece of terrace wall – possibly check dam – ran east/west across a broad gully, near its top end. The step in ground level ran the full width of the gully, but the wall was only visible over a short section toward the middle. Made from unworked basalt blocks, it was covered in white, black and orange/brown lichen, with, possibly, one small spot of rhizocarpon.

The ruined church of Ayios Theodoros (SE0054, recorded by TAESP as TP060) lay just outside the square to the east, south of the gully, manifesting itself as a 10 x 7 m pile of rocks topped by a large *mosphilo* and dotted with spiny burnet. It

sat on a gently sloping spur that ran down to the northeast through fields, some covered in stubble, some abandoned and some terraced. Whilst there was enough stone and sufficient tile to suggest that these were the remains of a building, their identification as a church was taken from the cadastral plan.



Figure 5.20 Ayios Theodoros Church (SE0054).

The amorphous pile was curved around its south side, but straighter across north where it ran parallel to a dirt track. There was the vaguest hint of a wall at the northeast corner; one or two stone blocks sat on top of each other, and some pottery was wedged between them. Some of the rocks had rhizocarpon on them, particularly those toward the middle of the pile, which would have remained undisturbed the longest. Amongst the rubble was the only pottery of note that was found in the square. There were pieces of pale buff, Late Roman tile and modern, red cover tile, there were pithos fragments with an organic temper that could place it in the pre-Hellenistic period, before 300 B.C.

A lot of loose rock in the vicinity had been cleared into a 6 m long, teardrop-shaped, pile of rocks lay upslope, some 45 m west of the church, and several lengths of field clearance and terrace wall, which served as field boundaries beside the track that ran past the church.

5.2 Occupation, Exploitation and Communication.

Today the Nikitari survey area ranges from accessible to remote; from the built-up, occupied area around Nikitari village, the intensively farmed and worked land in the north, to deserted, forested land high up the Rotson valley in the south. Despite the massive impact of tree planting on the landscape – in places entire hillsides have been terraced, by bulldozer – the longer growing cycle of the trees meant that day to day intervention in the south was far less than in the north where settlement and the more demanding agricultural and horticultural crops required a constant human presence. The upshot of this was that structural evidence had survived far better in the mountains in places where it was impossible or uneconomical to terrace the ground, or where the trees had been planted prior to the advent of mechanical terracing in the 1950s (Thirgood 1987: 358, n.12). Conversely, the cultivated fields in the north resulted, at the right time of year, in far better ground visibility and was a more fruitful area for smaller material evidence than was the carpet of pine needles in the south.

The changing topography of the survey area appears to have played a significant role in the development of settlement and the exploitation of resources in and around Nikitari village. The 400 m contour, emphasised now by the forest boundary, is a useful dividing line, marking as it does a distinct change from mountain and foothill to the much flatter ground leading out to the plains. Above it, apart from the enclave around Asinou village, the valley sides run steeply down to the valley bottom rendering them unsuitable for large-scale cultivation without the extensive terracing employed by the Forestry Department. Below the 400 m contour settlement is now centred upon Nikitari village and the land all

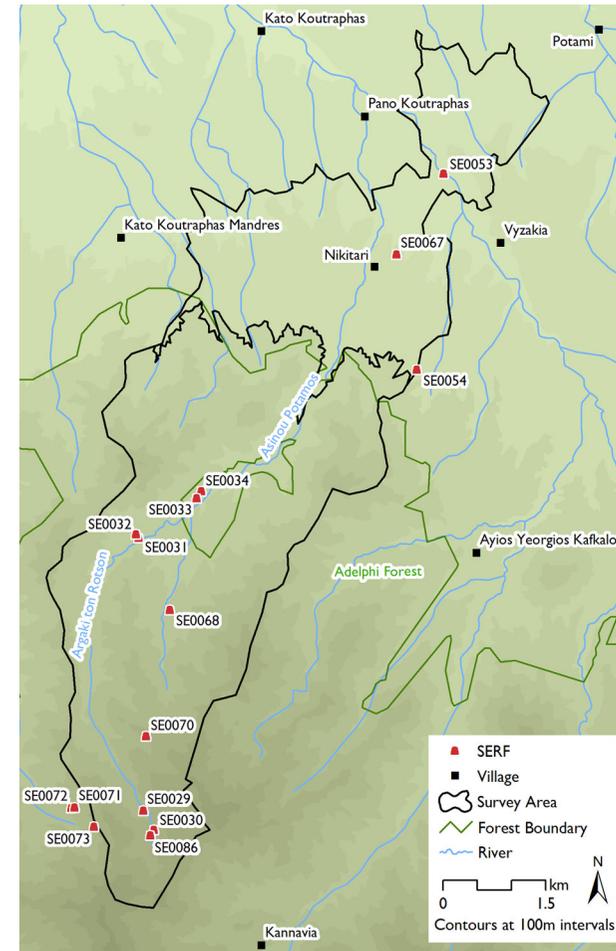


Figure 5.21 SERFs in the Nikitari survey area.

around it is cultivated; the level of settlement evidence recorded in this part of the survey area suggests that this has long been the case.

Dating the settlement evidence found in the Nikitari survey area was problematic; seldom was any clearly dateable pottery found with the structures identified, or indeed anywhere in the mountains. I was able to augment the little that I did find with that recovered by TAESP, however, and rudimentary associations between certain types of settlement evidence and a particular period were possible.

The Roman Period

The earliest, clear evidence of settlement in the Nikitari survey area dates from the Late Roman period – from the 4th century A.D. Buildings of three or four rooms were built apart from one another, but not isolated. Many were probably within sight and, possibly, within hailing distance of one another. On the plains these structures were farmsteads set amongst their fields; in the mountains no such label can easily be assigned to them.

TAESP found evidence of Roman farmsteads amongst modern wheat fields, some 4 km to the west of my Nikitari survey area (Figure 5.22), at Linou *Vrysi tou Haji Christofi* (TP202) and Petra *Phoukasa* (TP221) (Given 2003b), and a possible agricultural village, Petra *Lithosourka* (TP216). Their transect survey also identified a peak in Archaic to Roman pottery (750 B.C. to 650 A.D.) at Pano Koutraphas *Sanidhia* (TP245), rather closer to the Nikitari survey area. There was too much pottery at Sanidhia for it to have been a single farmstead, but the concentration did not extend far enough to incorporate more than one establishment if the spacing was the same here as it was further to the west. It

seems most likely that the scatter at Sanidhia was the vestigial remains of a substantial agricultural estate or village and its manuring halo (Given 2003a).

The settlements to the west can be associated with the copper mine at Skouriotissa, which was well established by the 4th century A.D. (Bruce 1937: 663-664; Kassianidou 2000: 751-753). *Vrysi tou Haji Christofi*, *Lithosourka* and *Phoukasa* were all in the Buffer Zone to the south of the Attila Line that divides the island, and it is quite possible that a network of similar farmsteads and villages continued into currently inaccessible areas in the north of the island, flanking the mine and providing food for its workers. Much of the land eastward currently lies to the north of the Buffer Zone, so it is impossible to estimate the extent of this possible network. The remains at Sanidhia are unlike anything found nearer to the mine, suggesting a different way of life at this remove from it. A separate community of farmers on the plains, north of the mouth of the Asinou valley, associated with the Roman communities further up the valley, and sitting on the road between the mines at Mavrovouni in the Lagoudhera valley and the coast, is a very tempting idea. Sadly there is no firm evidence to make the connection into the valley, not least because the modern village of Nikitari sits between the two areas, making any meaningful survey impossible. The intervening area was not completely devoid of Roman material, however, and sporadic sherds continued the line of Roman evidence up to the concentration found by TAESP to the northwest of Asinou church, and the small structures further up in the valley.

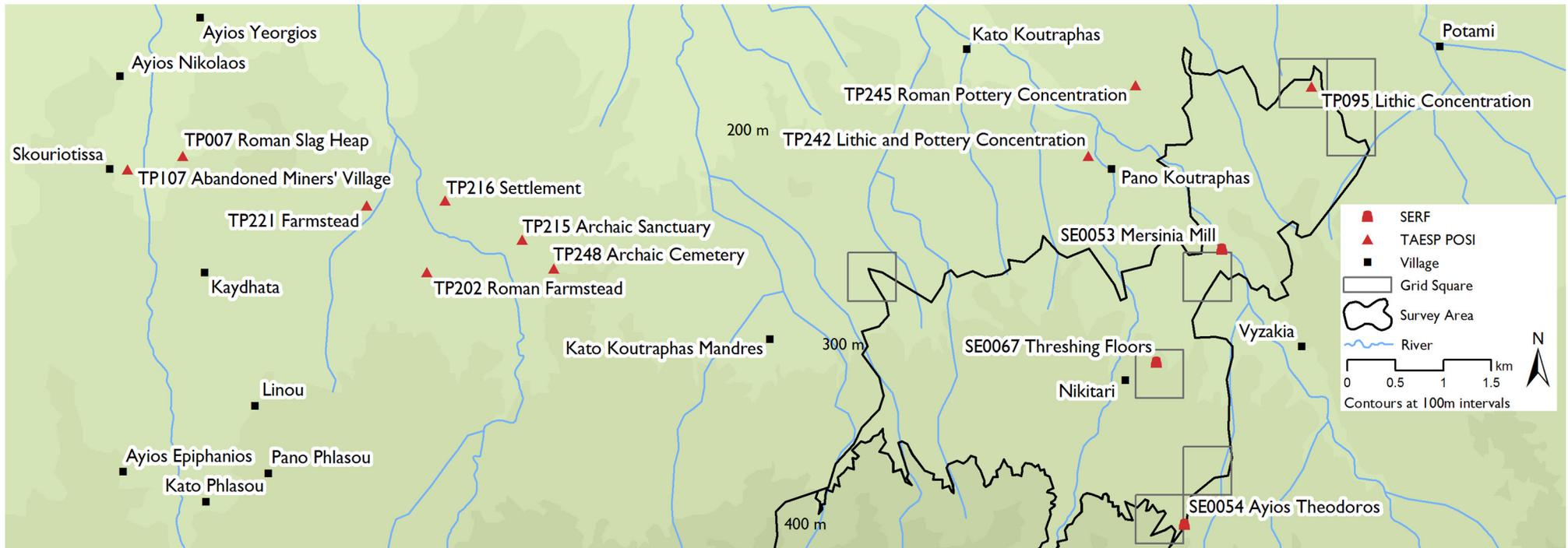


Figure 5.22 Farming to the north and west of the Nikitari survey area.

Individual structures, similar to the farmsteads on the plain, were found all the way up the valley, close to the river course without actually being on the valley bottom. At three of these structures – Khalospita (SE0029), Mandres ton Rotson (SE0030) and Trimitheri (TP220) – Late Roman pottery and tile were found. At Mandres ton Rotson, whilst there was no conclusive evidence, the pottery could have dated back to the Late Hellenistic period, indicating even earlier occupation

of the upper valley. Two other structures – Khandakia (SE0068) and Laxia tou Laona (TP200) – were similar enough in form to be grouped with them, and some very unclear structural remains at Pykroathasoudhi (SE0032) and Mandres tous Jerenides (TP038) might represent two more, similar sites.

The regularity with which the structures are sited from the top of the Rotson down river to just south of Asinou village suggests a healthy network of occupation along the valley. Whilst they might have been more dispersed than some later settlements, these were not isolated dwellings. A path is marked on the maps, running along the valley bottom, beside the river, and traces of it are still clearly visible from time to time – between Mandres ton Rotson and Khalospita, for example. So, not only were these structures not isolated one from the other, it appears that they were far from isolated from the world outside the valley.

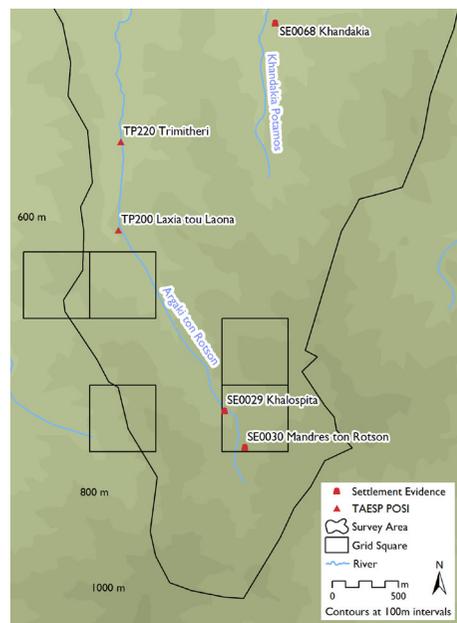


Figure 5.23 Roman sites in the south of area the Rotson valley.

The spacing of the individual structures along the valley suggests that the occupants of each were exploiting the small area of forest around their home, rather than being employed in a larger, communal project based around a nucleated settlement.

The Medieval Period

There was in the Medieval Period at least some degree of reoccupation of old sites and structures throughout the valley; pottery at Khalospita (SE0029), Mandres ton Rotson (SE0030) and Trimitheri (TP220), as well as all around the church of Panayia Phorviotissa, included Medieval and post-Medieval wares.

Whilst small family or working groups continued to live and work apart, in the valley, much of the population began, during this period, to gravitate together in villages; both Asinou and Nikitari are included on the Venetian village lists of the 16th century and the latter may have been the estate of Micidi (Goodwin 1984) or the medieval village of Chittari (Jeffery 1983: 283). This nucleation in part reflects the strengthening grip of the feudal system of the population. Under the Franks and, later, the Venetians, the island was divided into fiefs; peasants and serfs were bound to their village and to the land, which they worked for their lord. The landholders had complete mastery over their tenants whom they taxed and could sell or exchange along with the rest of their property (Christodoulou 1959: 71; Karouzis 1977: 26). The village served to collect and control the lords' goods and chattels, giving them a central place from which to organise their affairs, to collect produce and extract taxes and tithes.

The two or three shepherds' huts, about mile upstream of Panayia Phorviotissa noted by Gibraltar as the only human habitation in the area (Gibraltar *et al.* 1933), were probably rather closer at Platanoudhi, usually simply referred to as Asinou village (TS03). Both here and at Pera Yitonia (SE0033) there are clear signs of renovation and reuse during the 20th century, but pottery evidence could date their origin to the 15th or 16th century. These two clusters of structures sit up

on high ground, away on either side of the river. Directly between them, however, near to the vestigial remains of the church of Ayios Ioannis, TAESP located an area (TS12) where the density and range of pottery suggested a habitation site. The pottery – storage vessels, cooking ware and water jugs – was recovered from a stable surface and this, coupled with the locality name, Khalospitias (ruined houses), confirmed that it was not tumbled detritus from Platanoudhi, but a third, occupied element of Asinou village (Given *et al.* 2002: 34).

The 1565 village list records 45 *francomati* living in Asinou (Grivaud 1998: 466-470). In addition there would have also been serfs resident in the village. It is impossible to judge the size of the settlement from these numbers because there are too many variables; we cannot know, for example, how many dependants each *francomato* had, or how many serfs lived in the village. Even with no serfs in the village, Asinou could have had a population of 250; it was clearly as large a settlement as the spread of archaeological evidence suggests. On the other hand, the same list credits Nikitari with only two *francomati*, and yet it may have been a feudal estate (Goodwin 1984) and as such might have had a considerable population of serfs.

Nikitari, whilst still close to the mountains, probably relied mainly on agriculture, whereas Asinou in the unique surroundings created by the meeting of two rivers and the shallower sides to the valley would have been likely to have a more mixed economy. In a similarly privileged position, Nikitari *Vouni* (TP031) sits on the northern flanks of the Troodos overlooking the Mesaoria plain (Given

2002b), but it appears neither on the Venetian lists nor later censuses even though pottery found there could have dated from the Medieval period.

Villages were not restricted to the plains and the foothills (Figure 5.24); Ayios Yeorgios *Aspri* (TP066) was built on a spur just outside the survey area, approximately 1.5 km northeast of Mandres ton Rotson. It does appear on the Venetian lists and was home to 6 *francomati* in 1565. Within the survey area, two more villages were taken to date from the same period – Lakxia tou Agrioklimatou (SE0070) and Mutallia (TP125) – neither of which appears on the Venetian village lists or later censuses. These villages would, presumably, have been largely employed in exploiting the mountain resources – the timber, resin and charcoal – and, perhaps, pastoralism.

Pottery found at Vouni and Lakxia tou Agrioklimatou suggests that they were occupied from as early as the medieval period. Had any of the settlements been post-medieval, they would have been very short-lived, early Ottoman villages for them to have decayed to the extent that two were not marked on Kitchener's (1882) map. One, Mutallia, is marked as 'ruins' – but it is likely that these would have remained in the general consciousness into the British Colonial period as it appears that Mandres tous Jerenides on the opposite bank of the river was occupied during the Ottoman period. A later survey, for the cadastral plans in the 1920s, identifies the ruined church at Mutallia, and marks Vouni as a sheepfold – Lakxia tou Agrioklimatou was, once more, not identified. On balance then, it seems likely that the villages identified in the Nikitari survey area were established during the Medieval period, with few of them surviving beyond it.

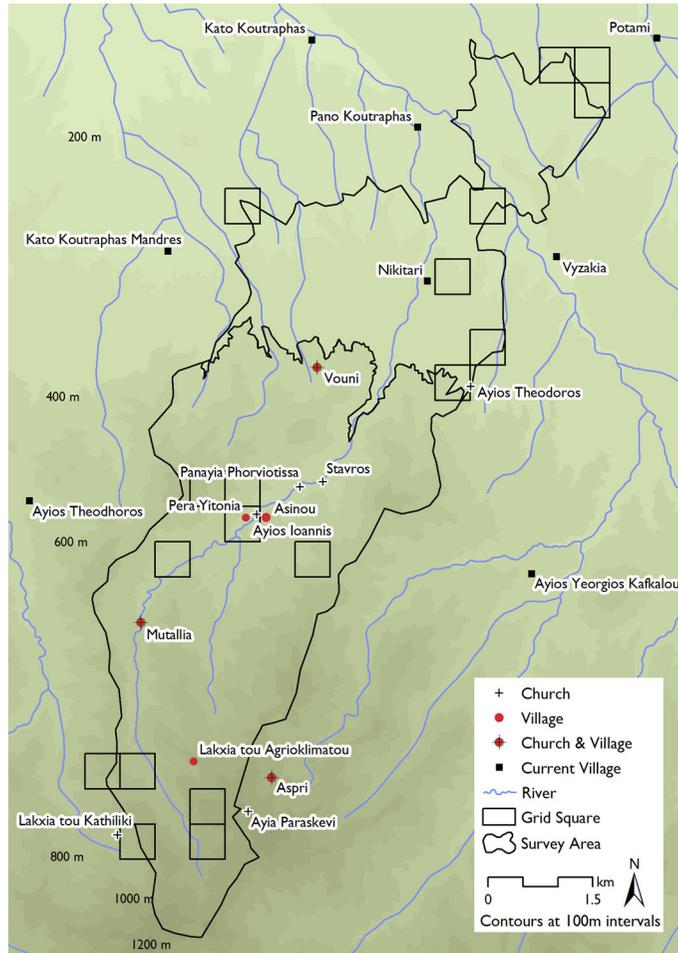


Figure 5.24 Villages in and around the Nikitari survey area.

In the mountain villages – Aspri and Mutallia – the church stood close to the end of the spur along which the houses were built, and whilst a church was not found at Lakxia tou Agrioklimatou a suitable, similar position was easily identified. At Aspri and at Lakxia tou Agrioklimatou the position at the end of the spur meant that it would be visible to anyone moving through the valley, but that many villagers would not necessarily pass it on a daily basis since the most obvious route out of the village led away from the church. This last point would also be true of Mutallia, although the spur that it sat on was a small one, and at the bottom of the valley, so whilst still visible to travellers in the valley, it was not visible from great distances. It did however sit near a crossing point on the river. It was perhaps not its prominence from outside the village that was important, but rather the fact that inhabitants had to make a pointed effort to go to the church that is worthy of note. The building was part of the village, but its slight remove – toward the end of the spur – meant that it did not become a familiar landmark on the main route in and out of the village, but rather retained a measure of importance and note.

At Vouni the village was again arranged along a spur, but in this case projecting toward the plains rather than into the enclosed valley; the church stood some distance away toward the root of the spur, nearer the slope of the mountain. If village churches were generally sited away from the main agglomeration of houses, on the less travelled route into the village, it might be suggested that the main source of labour and resources for the people of Vouni was on the plains to which they had easy access down the shallow nose of the spur, away from the church.

The churches at Asinou and Nikitari are not so clearly situated. The churches in Nikitari were not studied; one, whose bell tower was added at a later date, was probably built during the Ottoman period and stands on a road junction at the centre of the village. Gunnis describes it as modern (1936: 354). The other church is a large, late 20th century building standing to the west of the village, across the river where there was sufficient space for its construction.

Panayiotis Alexandrou Loppas of Nikitari, interviewed in August 2003, said that the church of Panayia Phorviotissa served the inhabitants of Platanoudhi, whilst Ayios Ioannis addressed the spiritual needs of those living at Pera Yitonia, when it was impossible for them to cross the river. Neither church is a part of the cluster of houses it serves, which carries on the pattern seen in the mountains, but beyond that they are in very different situations indeed. Phorviotissa maintains the high profile pattern of churches; it stands toward the end of a spur thrusting out into the valley. Ayios Ioannis meanwhile is right down by the river, perhaps still visible to those travelling through the valley, but from above – its position militating against it ever being silhouetted on the skyline. Its position close to, but above the river does, however, bear some resemblance to the church at Mutallia. Both are close to, but not at crossing points on the river.

The presence of the Church at Asinou would have been further emphasised by the monastery, which was established near to Panayia Phorviotissa, early in the Medieval period (Hadjichristodoulou and Marianthefs 2002: 9-10; Stylianou and Stylianou 1985: 114). The remains of its walls were noted early in the 20th century (Gibraltar *et al.* 1933; Jeffery 1983: 284), but their exact location is not clear; TAESP believes that structural and cultural material found 200 m up the

spur, to the south of the church are at least 300 years old and probably represent the monastery's final phase (Given 2003b).

Four lone churches were also identified in, or close to, the survey area: Stavros (TP033), Ayia Paraskevi (TP249), Ayios Theodoros (SE0054) and one, unnamed and not marked on the maps, at Lakxia tou Kathiliki (SE0071). Stavros and Ayia Paraskevi overlooked Asinou and Aspri respectively, from on high. Ayios Theodoros was at the top of a gentle slope above Nikitari; the gradient and its further remove from the village argue against it being such a dominant feature of the lives of the villagers as Stavros or Ayia Paraskevi would have been. The unnamed church at Lakxia tou Kathiliki was in a similarly prominent position, facing west. It stood just outside the survey area to the west and no further survey was done beyond it; perhaps a medieval village lay in the valley below.

Ayia Paraskevi is particularly interesting: it stood close to but just below a high point on the ridge line marking the edge of the Nikitari village boundary. It would have looked down over the southern end of Aspri village, which already had its own church – Ayios Efxivios – looking out from its northern end. The village then, was blessed by the presence of the church that was part of it, and at the same time watched over by the church on the hill. It is possible that a similar impression would have been given at Asinou, although the two churches and the village there were not in such a convenient straight line. Given the feudal nature of Medieval society it is entirely possible that Ayia Paraskevi, built through the munificence of a landowner, was a reminder to his serfs and tenants of his presence at all times, and of course his nearness to God. Paths from east and west join the ridge path close to Ayia Paraskevi, and 700 m to the south the territories

of four villages meet. Whether or not it was a statement of wealth and power, this was one church that, unlike the churches in the villages, was placed so that it

would be passed, by as many people as possible.

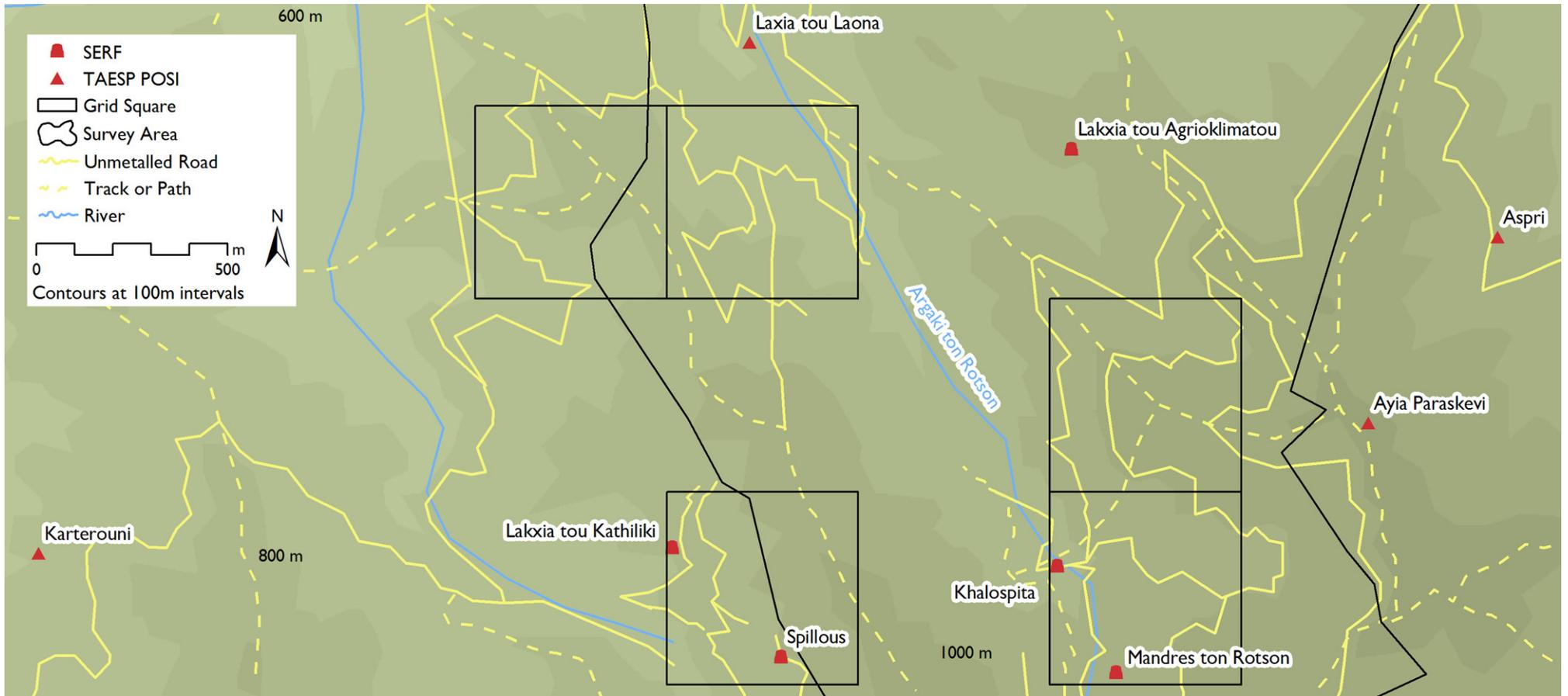


Figure 5.25 Tracks and paths in the southern Rotson valley.

As in the Roman period, it is unlikely that the inhabitants of the mountains were farmers; they were far more likely to be employed in similar pursuits to their predecessors. It is not clear when the copper mines closed, but the 4th century A.D., the 12th century or possibly even later have all been suggested (Kassianidou 2000: 754). It seems most likely that mining ceased in the area during the Late Roman period (Given and Knapp 2003: 303-305; Given *et al.* 2002: 31-32) and that the demand for charcoal decreased accordingly. But charcoal burning continued, and trees were further exploited for domestic fuel and wood for the construction and manufacture of structures, tools and equipment of all sorts. It is quite possible that the larger centres of population in the mountains meant that more of the forest was opened up to use and the destructive advance of the goat could begin in earnest. As we have seen it is possible that the goat herders were already beginning to base themselves apart from the bulk of the population.

No doubt traffic continued up and down the valley as goods and materials were traded between the plains and the mountains, particularly to and from Asinou. It would seem, however, that villages such as Lakxia tou Agrioklimatou, buried deep in the valley would not necessarily rely on north/south routes of communication; there is a distinct cluster of settlement evidence in the south, both within the valley and on either side. Paths came up into the valley from both sides; over the ridgeline past Ayia Paraskevi in the east and past the unnamed church at Lakxia tou Kathiliki in the west. The junction in the west was not as clear as the one near Ayia Paraskevi, but it was still part of the network in and out of the valley. It would seem logical that the ridgeways were long distance routes, taking the traveller up from the plains and into the mountain, with paths leading down to settlements on either side. The paths lower down, toward the

river, were those used by inhabitants of the valley for shorter, internal journeys between settlements or to and from work.

The Ottoman Period

Whilst there was still activity in the mountains and the valley, they became far less populous during the Ottoman period. The shift of the population away from the valley, apparent in the Medieval period, appears to have been completed by the end of the 19th century as first the upper reaches and then even the lower, more accessible area around the village of Asinou were abandoned. Even the presence of the Church diminished as the monastery at Asinou, which had flourished through the 15th and 16th, declined and was abandoned in the late 18th century (Hadjichristodoulou and Marianthefs, 2002: 9-10), leaving only the church of Panayia Phorviotissa. The valley ceased to be a place to live, and became a place of work – a resource to be exploited, and a place of occasional worship.

Asinou was still occupied during the Ottoman period; contemporary pottery was found at all three localities – Platanoudhi, Pera Yitonia and Khalospitiaes – and the Venetian list of 1565 recorded 45 *francomati* living in the village, but by the time of the British census in 1881 it had disappeared from the record (Grivaud 1998: 466-470). This of course need not imply that the area was completely deserted; parts of Asinou were reoccupied in the 20th century, but it was no longer an official village. It had by this time been incorporated within the Nikitari village boundary. Clearly then, when the bureaucratic lines came to be drawn around the village territories of Cyprus, Nikitari was the more important of the two settlements.

Archaeological evidence for settlement at Nikitari is sparse, not least because little survey was done in its immediate vicinity. What little pottery was found in the fields on its margin was generally late Medieval or Ottoman to Modern. The village does appear in the tax lists and censuses of the 16th and the 19th centuries (Grivaud 1998) and a considerable increase in size – as opposed to the diminution of Asinou – is indicated. Whilst it is true that Nikitari flourished as Asinou languished, this did not represent a direct transfer of population; overall the population in the area declined. In 1565, 45 *francomati* lived in Asinou, and two at Nikitari (Grivaud 1998: 466-470); as discussed above the total population would have been considerably more in both villages, a sizeable one in Asinou. In 1825 six taxpayers were recorded as resident in Nikitari; Asinou does not appear on the list (Papadopoulos 1965: 124). This number could correspond to the total population of 61 recorded in 1881 (Grivaud 1998); the village had certainly grown since the Medieval period, but it was still considerably smaller than Asinou had been 300 years before.

Nikitari's position might suggest that its inhabitants would have been reliant upon agriculture and horticulture, simply because of the flatter, more accessible ground around it, but in 1832 the village tithed of wheat and barley was lower than any nearby villages, and considerably less than many others in the district (Papadopoulos 1965: 187). This would suggest that the village still relied heavily upon the forests and the mountains for their livelihood, quite possibly purchasing wheat and flour to supplement what little they were able to grow for themselves.

In the mountains, the villages appear to have declined during this period; very little Ottoman material was found at Aspri, and whilst later pottery was found at Lakxia tou Agrioklimatou, the site not surveyed systematically. Some of the Roman sites reoccupied in the Medieval Period showed signs of continued use; pottery at Khalospita (SE0029), Mandres ton Rotson (SE0030) and Trimitheri (TP220) included post-Medieval wares. This reuse was, perhaps on a seasonal or occasional basis, typified by such peripatetic activities as sheep and goat herding.

At Nikitari *Mandres tous Jerenides* (TP038) the remains of two well-built, sizeable structures attest to some settlement in the upper valley during the Ottoman period, and possibly later, as at least one piece of 19th century pottery was noted in the chinking of one wall. These buildings are something of an aberration; they are in far better repair and made to a much higher standard than any other structural remains found south of Asinou. They were not, despite the cadastral plan's attribution, built to house livestock, but perhaps they were the living quarters for the herders whose presence led to the locality name.

Pater Kyriakos of Nikitari told me that shepherds from the village of Spilia – 8 km to the south – used the buildings of Mutallia, on the far bank of the Rotson, for their sheep; he did not know of any use of the structures at Mandres tous Jerenides. And Panayiotis Alexandrou Loppas spoke, rather disapprovingly, of a spring here that was used by both herders and their flocks. Neither was clear as to when he was speaking of, but it is likely that they were referring to the first half of the 20th century, by which time the Forestry Department was actively seeking to exclude goats and sheep from the forest (Thirgood 1987). Given this tradition

of later use, it is not unreasonable to suggest that herders were based here permanently or seasonally during the Ottoman period.

The location of these structures is perhaps taking the siting of herders and their flocks on the edges of settlement to extremes; if Mutallia was abandoned by the Ottoman period, the nearest village to Mandres tous Jerenides would have been Asinou. The two structures stood at a focus of human activity in the valley, however, close to two river crossings, junctions of routes from north, south and west, and a spring (Kitchener 1882). These would all be useful resources for anyone exploiting mountain and forest resources and having a produce that they might wish to take to market, be it cheese, charcoal or resin.

Exploitation of the Landscape

At the risk of appearing to advocate the idea of a Mediterranean way of life that remained unchanging through the centuries, the continuity of settlement in the region makes it logical to discuss the exploitation of natural resources in the Nikitari survey area as a whole, rather than dividing the topic by period. Whilst it is clear that settlement and working methods in the valley changed over time, it would appear that many of the actual resources exploited in it did not. So, for example, whilst timber was extracted from the forest in both the 4th and the 19th centuries, the techniques by which it was extracted were different, just as methods of agriculture developed from the Roman to the Ottoman period. Emphasis on exploitation would have changed as demands for different products rose and fell, or as the size and distribution of the population shifted, but on the whole, until the arrival of the British and their extensive reforestation policy, the

inhabitants of this area would have extracted the same produce from the same resource year after year.

Despite the extensive pine plantations at the south end of the survey area, check dams in gullies, terracing and retaining walls on small low spurs and slopes were relatively common. These were often, but not always, found close to one of the individual structures, low down on the valley sides – the Roman sites. Whilst some of them may be evidence of Forestry Department soil conservation work (Thirgood 1987: 218), the majority are more likely to be the remains of small plots established by the mountain-dwellers growing subsistence crops.

Whilst it is not clear exactly what the work carried out by the Forestry Department entailed, they are known to have built check dams across gullies, (Pitcairn 1937: 25; Unwin 1925: 19), and since they often used local workers and such resources as were immediately to hand, it is likely that the forestry work will closely resemble traditional soil conservation measures. Nevertheless, the variety of constructions identified in the valley, their positioning and apparent functions suggested, in most cases, something more sophisticated than simply erosion control (Figure 5.19).

As the valley appears to have been more widely settled, on a permanent basis, it is reasonable to suppose that these soil retention methods were built by the original occupants of the dispersed dwellings during the Roman period. They were, presumably, maintained and adapted by later occupants of the sites, as and when their seasonal or occasional presence required.

On the plains, outside the valley, clear signs of earlier agriculture were identified in the broad expanses of stubble that dominated the landscape during this survey. I have already discussed the possibility of a Roman agricultural estate on the plains just to the west of the Nikitari survey area. In the very north of the area, one of TAESP's intensive survey zones overlapped with one of my grid square clusters (GS037-GS039); there was very little pottery here and the majority of it could have dated from any time since the 12th century. At Potami *Kambos tou Lemonari* (TP095), however, the thin scatter of pottery was augmented by a considerable quantity of ground and chipped stone, which was possibly the residue from an Aceramic Neolithic, seasonal farming camp (Given 2002b; McCartney 2002: 4).

Both TAESP and I were plagued in this region by bad visibility, but the pottery and lithic evidence suggests that the wide, flat and, apparently, ideal farming land in this area was not exploited to any great extent between the Neolithic and the 20th century. Despite the paucity of material on the ground, however, old field-boundaries marked by small steps in ground level or distinct lines of large stones within the larger, modern fields were quite clear. In a country where the customs of inheritance mean that land plots were often subdivided with every generation, boundaries between plots were seldom more than a low ridge between two ploughed furrows (Christodoulou 1959: 84-85). The fact that the boundaries found in this area were still visible suggests that they are unlikely to date from antiquity and can, presumably, be associated with the sparse Medieval to modern pottery recorded in the area.

No shelters or storage sheds were found in this area, but these fields are only 3 km or so from Nikitari and if, as seems likely, that is where the workers in these fields came from it would be possible for them to do so each day. With the work force travelling out to the fields each day, there would be no need for any more than the most rudimentary of shelters to protect them from the worst effects of the weather.

The row of threshing floors (SE0067) on the southeast margin of Nikitari village, are mirrored by a similar row on its northwest margin. Besides being in the ideal position to catch the breeze for winnowing, as it blew up across the plains from Morphou, these threshing floors bound the edge of the occupied area of the village. Insufficient pottery was found associated with the threshing floors to date them – a 15th or 16th century sherd was found nearby – but the eucalyptus shade trees suggest that they remained in use into the British Colonial period. A similar band can be seen at Kato Koutraphas *Mandres*, separating the main agglomeration of houses from the fields; at Asinou the threshing floors are rather more separated, but nevertheless sit around the village between it and the fields, within hailing distance of the houses (Chapter 2; Mejelle 1901). There are practical reasons for this beyond the need for a good breeze – it was a convenient stopping place between the fields where the crop was produced and the village where it would be used.



Figure 5.26 Threshing floors (SE0067) to the south of Nikitari village.

The threshing floors also occupied a transitional space; the harvest was brought home, but at the threshing floors it was transformed from the cut stalks to straw, chaff and grain. The constituent parts, each now with an identifiable function were then ready for storage or use. The harvest also underwent a transition as it was reduced in size when, during the Ottoman period, a percentage of the original was removed by the levy of a tax in kind (Given 2004). Whilst awaiting this taxation, the grain was kept stored on the threshing floor in a sort of limbo – no longer the growing crop, but not yet the store of food for the coming year. Another practical consideration for having the floors so close to the village is that

of security; once the grain was heaped up it would be necessary to watch it, whether it be by villagers concerned about theft of their property or by government officials determined not to lose out on the tax that was due to them. Once taxes were paid and the harvest stored the final, seasonal transition from summer to autumn could be celebrated by feasting and dancing upon the now cleared threshing floors.

If life on the plains was concerned primarily with agriculture then life in the mountains was based upon a far broader economy. The inhabitants of the valley would always have had to trade for wheat and straw – staples for themselves and their livestock – for which they could offer the products of the forest and of their goats in exchange: timber, fuel, pitch, charcoal, cheese and skins (Christodoulou 1959: 100-105, 109).

There are limited records of pastoral produce before the 15th century despite sheep and goats having been domesticated in Cyprus since the 10th millennium B.C. at least (Peltenburg *et al.* 2000: 850). One set of accounts from 1318 give a detailed audit of the estate of Psimolopho, which show that relatively few sheep or goats were killed for meat (Given and Knapp 2003: 290-292; Richard 1947); the animals were primarily kept for their milk and skins. During the Ottoman period, whilst agricultural land was abandoned and the population decreased, it appears that the number of flocks on the island increased, taking advantage of rights that permitted sheep and goats to graze on uncultivated land and in the forest. Flocks were also seen as a moveable asset during these troubled times and many *mandres* were built in the forests to house them, and perhaps to hide them away (Christodoulou 1959: 185, 190).

Goats can range over a wider range of habitats than sheep, which are predominantly lowland creatures (Christodoulou 1959: 185, 190), and there are plentiful local accounts in the Nikitari survey area of tending them in the forests of the Rotson valley and surrounding mountains in the early 20th century. The structural remains in the area were used by these 20th century shepherds as temporary settlements whilst their flocks grazed a particular area; for example the shepherds of Spilia, at Mutallia (TP125), and Panayiotis Alexandrou Loppas, a resident of Nikitari, with his parents at Aspri. The presence of a screw top jar that had once contained shoe-polish, probably dating from the first half of the 20th century, suggests that the enclosure at Nikitari *Mandres ton Rotson* (SE0086) was also used during this period.

It seems, however, that pastoralism was an important element of life throughout the studied periods. It is probable that *mandres* numbered amongst the Roman structures found in the Rotson valley to complement the considerable agricultural activity on the plains. With the closure of the mines and the drop in demand for timber and charcoal, more land would have been available to the pastoralists who reoccupied some of the mountain structures in the medieval period. Of those that were still in use during the Ottoman period, perhaps an even greater proportion of the structures were used by goat herders given Christodoulou's (1959: 185) talk of hidden *mandres*. The remains of several very large Medieval to modern storage vessels found at Khalospita (SE0029) could conceivably have contained *halloumi*, which Pococke (1998: 53) saw being stored in oil, to preserve them, during his visit to the island in 1738. There was, however, nothing such as milking vessels that could definitely be associated with pastoralism.

The enclosure at Nikitari *Mandres ton Rotson* (SE0086) built close to SE0030 was unusual; it was the only pen identified in the mountains either by TAESP or by myself. It measured 17 x 6 m, suggesting a sizeable flock of goats, and from its state of repair it would appear to have been maintained more recently than the nearby structure (SE0030), which had evidence of use during the Roman period, and possibly both the Medieval and Ottoman periods. The shoe polish suggests that it might even have been in use, whether legally or not, under the British despite their efforts to exclude goats from the forest.

It is not wise to rely too heavily on the locality names; *mandres* appear across the cadastral plan like a rash. Locals in Nikitari speak of leaving their flocks in the forest to fend for themselves in the early 20th century, and E.D. Dobbs, the Principal Forest Officer from 1882 to 1885, noted that Kykko Monastery had flocks totalling 20,000 goats that were put to wild pasture rather than herded (Thirgood 1987: 109). We need to modify our expectations of a *mandra* and think of a place where herders based themselves whilst tending a free ranging flock, rather than expecting to find collections of shelters, pens and enclosures that are found, for example, in the Peyia survey area or the Makheras forest (Ellis Burnet 2004: 108).

A wide range of trees was required by ship builders in antiquity, and each species contributed its unique properties to the finished product. Work on Mediterranean shipwrecks has identified a preference for particular species in particular parts of a ship – for example, oak and elm for keels and frames, pine for boards and masts, and nails of olive or carob (Ellis Burnet 1997: 65, 67). Ammianus Marcellinus (1982) writing in the 4th century A.D. gives the impression that this

variety was freely available on the island – as were all the other resources necessary for ship building.

Shipbuilders were not alone in their exploitation of the forest; timber was a staple building material before the 20th century. Throughout the periods under study here the forests would have been plundered by builders of all types of structure – domestic, civic, religious, houses, bridges, churches. All types of wood were, of course, used for many other purposes besides building; from combs to tool handles, to musical instruments, boxes, furniture, to chariots, carts, and their wheels (Ellis Burnet 1997: 65). The quantities of wood required point to the existence of organised, commercial enterprises extracting timber from the forests. In Turkey, the Rough Cilicia Archaeological Survey Project have identified Early Roman ‘logging camps’ amongst cedar trees at the head of the Kalidran canyon (RCASP 2003). It would be unwise to make too strong a comparison between their rectangular structures and my own, but given their location high up in the valley and apparently on the main thoroughfare beside the river, it would be reasonable to suggest that some of the older structures in the Rotson valley were used by Roman lumberjacks. In addition, the river would have been of no use for transporting timber down the valley, so the wood would have been moved primarily by animal – oxen, asses, mules, donkeys – or human power, which would, necessarily have limited the practical size of any load (Meiggs 1982: 332). It seems even more reasonable therefore that a considerable amount of dressing of the timber would have taken place prior to transportation, further supporting the argument for lumber camps in the mountains.

Ultimately as destructive to the trees as felling was the manner in which resin was extracted from them; sapwood was either removed from felled pine trees or cut into on standing trees and the resin extracted. The second of these methods could kill a tree in a few years, as opposed to the more immediate effect of the first (Meiggs 1982: 469; Pococke 1998: 52; Thirgood 1987). A rather more delicate approach was used on the plane tree, the lentisc and the terebinth where a shallow slit in the bark was all that was required for the sap to run freely. This finer sap was favoured for its scent, its medicinal and, it seems, aphrodisiac properties (Gaudry 1855; Pococke 1998: 52). During the Medieval period labdanum, the sappy substance exuded by the cistus plant, was gathered either by dragging lengths of yarn across the plants or, for a less pure product, combed from the beards of goats that had grazed amongst the plants (Pococke 1998: 52-53).

Pitch, produced by heating the heavier resin extracted from pine trees, or by burning sapwood slowly in a kiln, was widely used in the building trade as a preservative, especially on doors and roof timbers. It was also used to seal and waterproof a variety of vessels – storage pithoi, goatskins for wine, and ships (Meiggs 1982: 453; Thirgood 1987: 118).

It is clear from written sources that resin and pitch were used extensively from antiquity, but visible evidence of it on the ground probably dates to the late Ottoman period, or early 20th century, some of it perhaps later, although no dateable material has been found. Two lime kilns marked on the cadastral plan – one 500 m south, and one 1700 m southeast of Mutallia (TP125) – are more likely, given the igneous nature of the geology in the area, to have been pitch

kilns. TAESP found two more beside the track between Asinou and Ayios Theodoros (TP105), and many trees in the mountains show scarring attributed to resin extraction.

I mentioned, above, that the metallurgists at Skouriotissa and Mavrovouni would have consumed large quantities of charcoal in their smelting furnaces, quite possibly more than could be produced in their immediate vicinity. Rather smaller but nevertheless considerable quantities would have been consumed in domestic cooking and public sacrifice (Meiggs 1982: 97; Thirgood 1987: 117). The Rotson valley, with its steep, forested sides unsuitable for agriculture, would have been ideal ground for the production of large quantities of the fuel. There is rather less evidence for charcoal burning in the valley than there is for resin production, but local informants have pointed out many places where charcoal burners worked in the early part of the 20th century. Relying once more on the apparent continuity of the exploitation of natural resources in the valley, and considering the plentiful raw material, it is fair to assume that charcoal was produced in the Nikitari area from at least the Roman period onward.

Of course wood was, on occasion, simply burned as fuel; large quantities were consumed in the furnaces of Turkish baths (Gaudry 1855: 200) and domestically it was used in ovens and kilns (Thirgood 1987: 117). Beyond the trees it is sometimes hard to believe that there is anything growing in the forest that was not used in some manner or other in the past, although archaeological evidence for this is hard to come by. One local source said, 'In Cyprus, if it grows we will eat it.' Another spoke of terebinth berries being mixed into bread dough. And even milk vetch, an unprepossessing plant that grows above about 700 m

elevation, can be eaten – if toxins are removed from the plant by boiling; it was also used, without treatment, as a fodder crop. There is no clear evidence that vines have been grown in the valley in the past, but the remains of a shelter (SE0073), which would have been unsuitable for livestock, had dimensions which were not dissimilar to small field shelters of the sort found in vineyards (Given 2000: 230). Given the gradient of the ground on which it was built, no nearby plot planted for food would have been large enough to occupy a worker long enough to warrant any permanent structure. It is not, however, inconceivable that vines could have been grown in the vicinity; on the other side of the valley the locality name Lakxia tou Agrioklimatou means gorge of wild grapes. This, however, is hardly conclusive evidence of a thriving wine industry in the area.

Community and Communications

The tarmac road from Nikitari currently stops near the midpoint of my survey area, just beyond Panayia Phorviotissa where a seemingly endless stream of coaches turns around whilst their passengers visit the church. For most people the Asinou valley is, these days, a cul-de-sac, and the Rotson valley inaccessible. It seems that the situation was much the same in the 1930s when the church was a destination beyond the civilised realm of the road for at least one European visitor (Gunnis 1936: 354), who recommends hiring a donkey for the onward journey from Nikitari to the wilds of Asinou, 3 miles away. The valley, then, is perceived as a destination, with the church as a focus. Or perhaps, more precisely, the church is perceived as the destination and the valley as a setting – the forest and the mountains forming a picturesque backdrop to the church, and now its three attendant restaurants.

A minority still see the land near the church as a destination for work, where they tend small patches of land on the shallower or terraced slopes in this slight widening of the valley. One family still sees it as a place of occasional occupation, in their modern house built on the west side of the river, below Pera Yitonia. But few use the valley, these days, as a thoroughfare, despite the extensive network of gravel tracks and roads, built and maintained by the Forest Department, that allows access to and through the valleys. The shortcomings of modern motor vehicles limit the number of routes available to travellers, compared to a time when progress through the landscape was by foot.

The general flow of the forest roads is from north to south; from Nikitari to Ayia Irini, Spilia and Kourdhal. The only significant road that crosses the valley from east to west runs from Kapoura to Ayios Theodoros and passes close to the Phorviotissa church. In addition to these roads there are many tracks and paths that appear on the maps, and still more whose remnants are evident on the ground, all of which attest to a far more sophisticated and inclusive network that covered the whole valley in the past, uniting it as a living, working whole. Outside the constricted world of the valley it is harder to identify foci and generalised flows of movement. It is undeniable that Nikitari village is the focus of many people's lives, that many are concerned with the produce of the fields to the north, and that the division of the island does currently constrict movement north of Nikitari to an east/west flow. But outside the valley the network of tracks and paths joins to the network of metalled roads, which spreads across the island, and the speed of travel and the distances involved are far greater than those that concerned us in the mountains. Now the inhabitants of the Nikitari survey area look further afield than their predecessors did and, whether for work or pleasure,

think nothing of a one-hour trip to Nicosia or a two-hour trip over the mountains to take them to the south coast.

It is not sufficient to say that in the past the Asinou and Rotson valleys were better known because more people lived in them and moved about the landscape. Those living there will have experienced their surroundings differently, and their experience will have been influenced by their way of life – the distribution of their settlements, their exploitation of the natural resources and the interaction of the different communities living in the area.

Roman period occupation of the upper valley was largely along the course of the river. The dwellings were too widely spaced to constitute a settlement (Chapter 2; Roberts 1996: 24), but they must be considered to have been part of the same community of valley dwellers. The steep sides of the valley would emphasise and daily reinforce the community identity; the watershed might even have marked the extent of the occupants' operations, but it did not define the community. Nested within this valley community, were other groups with common bonds based upon, amongst other criteria, animal husbandry or forestry. The process of felling trees, extracting resin, burning charcoal or grazing goats had considerable impact upon the landscape within which these communities operated. The marks they left upon the landscape would have identified the workers and their sphere of operation and, possibly, led to conflict between them when two or more communities sought to occupy the same space.

The lack of material evidence makes these professional communities difficult to identify, but the presence of settlement in the valley implies that the local

resources were being exploited. It would be a mistake to see such an enclosed community as isolated, even if the location of their dwellings – close to the river at the bottom of the valley – gives this impression. The limited resources available to them is more likely to have compelled them in the opposite direction and it is reasonable to expect that mutually beneficial relationships existed between communities producing timber, pitch or charcoal in the mountains and those to the south that concentrated on agriculture, or operated the copper mines in the region.

The nucleated villages make it far easier to identify coarse divisions of community in the medieval period, but do not necessarily reduce the number of communities present or simplify the complex relationships between them. Whilst different villages would have been better situated to exploit different resources, it is possible that there was less need for day to day interaction between the communities of different settlements as the larger grouping of population in a village meant a greater diversity of skills and commodities would be locally available. The reuse of the small Roman sites in the valley indicates that there were still those that had to live and work apart, but by this stage they were probably closely associated with one of the village communities in the region. The decrease and further concentration of population during the Ottoman period served to localise the settlements still further; the valley was still frequented by herders or foresters, but more and more Nikitari became the focus of community in this survey area, as the census records reflect (Grivaud 1998: 466-470; Papadopoulos 1965: 124).

The distribution of settlement in the Roman period suggests that then, as now, the predominant flow of travel would have been north/south between the valley and the plain. A path is marked on the maps following the bottom of the valley, which would have linked all the individual settlements, and stretches of it are still visible – a particularly well-preserved stretch runs between Mandres ton Rotson (SE0030) and Khalospita (SE0029). If, however, the inhabitants of the valley were supplying charcoal for the furnaces at Skouriotissa, to the northwest, and Mavrovouni, to the southeast, then there are tracks and paths still in existence that would have provided a far more direct route than a strict adherence to the valley would offer. The presence of Mandres ton Rotson at the very top of the valley also makes it unlikely that the Romans saw the valley as a long, narrow cul-de-sac; at that elevation, they must, surely, have had communication in directions other than north.

The wider distribution of the medieval villages and the knowledge of sites such as Aspri and Ayia Paraskevi make the network of communication between communities easier to imagine. The demand for charcoal for the mines might have dropped, but the mountain-dwellers would still have had to trade their cheese or their timber outside the valley. The east/west movement is emphasised by river crossings and the convergences of paths; Pera Yitonia (SE0033) sits above two fords, and two more are marked on the cadastral rather closer to Khalospitaes (TS12). Tracks also cross the river below Pykroathasoudhi (SE0032) and between Mandres tous Jerenides (TP038) and Mutallia (TP125). It is not clear if the network of paths developed after the medieval settlements were established, but it seems more likely that the settlements were built at strategic

points on the existing road. It is quite likely that the presence of a settlement then attracted more paths to it, thus increasing the complexity of the crossings.

Two other places worthy of comment are the churches of Panayia Phorviotissa and Ayia Paraskevi. Both stand at the meeting of several paths, but it is not clear which came first, the convergence or the church. If we again assume that at least one track or path existed before the church, and the position of both makes this likely, then, in the case of Panayia Phorviotissa this could well be the route used by valley-dwellers during the Roman period. The church would have been a powerful bond within the overlapping and nested communities of the area, and it is reasonable to suspect that these two examples influenced a wider ranging community than the churches at Vouni or Mutallia. The village churches were both a little removed from the houses and apparently not on the most frequently used path in or out of the settlement. This would have limited the number of people for whom the church was a meaningful place and consequently decrease the size of the community for which it provided a focus. Panayia Phorviotissa and Ayia Paraskevi on the other hand stood apart from any village at road junctions, thus extending the influence they could expect to have upon the population moving through the landscape well beyond a single settlement.

During the Ottoman period the population decreased and what was left of it shifted downstream, the monastery was abandoned and the church of Panayia Phorviotissa neglected. Against this background it is likely that everyday travel into the valley would have decreased considerably, but travel through or across it would have remained as common as before, albeit at a lower volume. Whatever the reason for a journey the valley would still be the obvious artery to take the

traveller southward from Nikitari. Without the settlements to visit within the valley the higher routes along the ridges, with easy access to east or west, would have been favoured, rather than the earlier route beside the river. No matter how scarce the population of the valley might have become, it was not until the advent of motor vehicles and improved roads that the circuitous route would have superseded the most direct. Until this happened the valley was enclosed, but permeable to its denizens – as opposed to the watertight, open-mouthed vessel that it is today.

Today, the church of Panayia Phorviotissa is the main focus of the valley; it was not ever thus. In the Roman period it is hard to identify a single focus; no doubt the occupants of each individual settlement focused upon their life and their work there, but perhaps saw the valley as a whole – a resource to be exploited, with points of contact on the plain or at the mines, beyond the hills. By the medieval period of course the church and the monastery had been established, creating a focus for the whole valley community, in addition to whatever loyalties or priorities each individual might have in their own community, village or church. It seems that during the Ottoman period this focus lapsed, and slipped out of the valley to Nikitari; it was not until the middle of the 20th century that the valley regained its spiritual centre amongst the working fields, terraces and hill slopes.

The Changing Valley

Despite the apparent continuity in the exploitation of the Nikitari survey area's natural resources between the Late Roman and Ottoman periods, it seems that patterns of population in the region were far from constant. Archaeological evidence and census data point to two episodes of occupation – the Late Roman

and the Medieval – and two of complete, partial or on-going abandonment – the Byzantine and the Ottoman. Local opinion is that populations moved down the valley until, finally, it was abandoned and Nikitari established at its mouth. This presumably is based upon memories of the final abandonment of Asinou village, and the ruins further south, which suggest that once the valley was occupied along its entire length. We should be wary, however, of assuming that the only way out of a valley is to follow the river downstream; there is a considerable network of paths linking the upper reaches of this valley to points east, south and west, as well as running to the north.

It is impossible to be sure of the number of inhabitants in the valley during the Late Roman period, but it would appear that the valley sides were quite well populated along the course of the river, in what was almost a ribbon development of small living and working units engaged in forestry or pastoralism. Jumping over the lacuna of the Byzantine period, the Medieval period saw an increase in population judging from the re-use of certain of the Roman structures in addition to the establishment of at least four villages and a monastery within the drainage alone. The centralisation of the population suggests a more cooperative approach to work and the extraction of resources, but this may have been in the interests of the landowners, rather than the workers. It is also possible that some element of specialisation was developed by each village; Nikitari favouring agriculture, whilst Mutallia concentrated on timber and charcoal production, for example. It is also likely that at this time, the shepherds began to be based outside the villages, closer to their mountain pastures.

The decrease in population during the Ottoman period saw the beginning of the move away from the remoter parts of the mountains and the eventual abandonment of the Rotson valley. The impression of abandonment beginning at the top of the valley and working southward toward Nikitari is a reasonable one, as the population decreased and the Forestry Department formalised the state forest boundaries. Of course, whilst the archaeological evidence allows us to chart the abandonment downstream, we have no clear evidence that the surviving population followed the same course; family ties or even personal preference may have taken them over the mountains rather than down onto the plains.

Despite the desertion of all its settlements, the valley was never completely abandoned; shepherds, charcoal burners and resin tappers continued to frequent the upper reaches and even, on occasion, the ruined settlements until well into the 20th century. Today many areas are seldom visited unless by forestry workers, hunters or the rally drivers that periodically race along the narrow, winding roads.

6 The Peyia Survey Area

The Peyia survey area, lying on the west coast of the island, takes its name from the Peyia Forest, which covers about 25% of the area's 60 km². Most of the land in the area falls into the territories of the villages Dhrousha, Inea, Arodhes and Kathikas that sit on the ridge in the east of the area.



The Peyia survey area rose to about 600 m above sea level, inland from the stretch of coast between Cape Drepanum in the south and Lara in the north. It incorporated parts of several broad drainages that ran roughly east to west. Two deep gorges – of the Avgas river and the Kouphon – cut through the survey area, running east to west, and a third – the Aspros – formed part of its southern boundary.

The area was chosen to include the lower reaches of a topographical cross-section of Cyprus, incorporating coastal strip and rising ground through maquis, forest and farm land, to the ridge on which the villages are built. The three gorges were of interest for the inevitable impact they must have had upon settlement location and distribution in the area, as well as upon land division, land use, and the movement, communication and interaction of people living and working in the landscape. Additionally the presence of abandoned Roman settlements on the coast and thriving villages, established during the medieval period, on the ridge

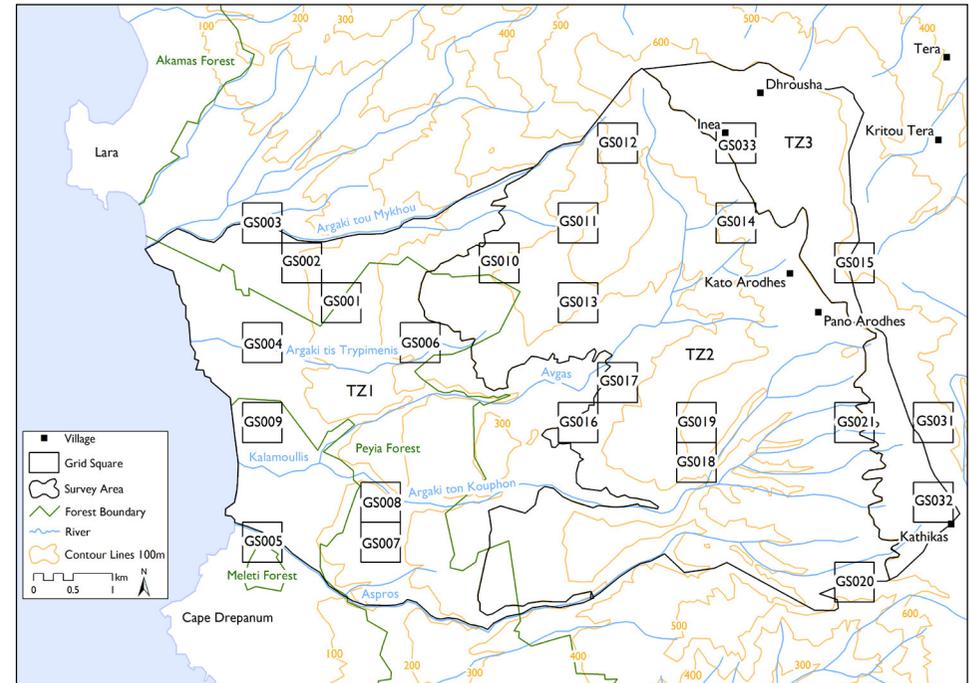


Figure 6.1 The Peyia Survey Area.

in the east of the area offered the opportunity to study changes in settlement distribution and land use.

Previous archaeological work in the region had found ample evidence of occupation and activity in the landscape. To the north, on the Akamas peninsula, this included Late Roman settlement and cultivation and a far-reaching road system that spread well beyond the peninsula (Bekker-Nielsen 2004; Fejfer 1995;

Gibson 2005). To the east, settlement evidence dating from the Neolithic to the present has been recorded (Adovasio *et al.* 1975; 1978; Sheen 1981). Just to the southwest of the Peyia survey area lay the Late Roman conglomeration of basilicas, burials, baths and domestic debris at Cape Drepanum (Christou 1992: 753; 1993: 831; Karageorghis 1971: 432; Steel 2004: 108). Just off shore from the cape on the island of Yeronisos evidence for settlement, worship and defence has been recorded, dating to the Chalcolithic, Late Hellenistic, Late Roman, and possibly the early medieval periods (Breton Connelly n.d.; 2002; Karageorghis 1983: 945). There has even been archaeological work to the west of the survey area; Hellenistic to Late Roman, and a little medieval, pottery, as well as stone anchors and ships' timbers were recovered from wrecks off Lara (Giagrande 1987; Howitt-Marshall 2003; forthcoming; Morris and Peatfield 1987). Within the Peyia survey area itself, previous intensive survey had identified Classical cemeteries in Topographical Zone (TZ) 3, whilst more extensive reconnaissance had found a Chalcolithic site in TZ1 (Baird 1984).

The Peyia Survey Area was divided into three topographical zones (TZ) for survey:

- TZ1: land below 300 m a.s.l. running from the coast up gently sloping ground, including most of the Peyia Forest that fell inside the survey area.
- TZ2: land between 300 m and 600 m a.s.l. Much of this zone comprised pastoral land on the lower slopes, and a mixture of used and abandoned agricultural land higher up, towards the villages.
- TZ3: land above 600 m a.s.l. situated on the ridge and covered almost entirely with vineyards, the villages and modern roads.

Vegetation and ground cover in the Peyia survey area ranged between open grassland and thick maquis. The maquis, which was prevalent in TZ1, consisted largely of juniper and terebinth; it often ran down to within a few metres of the sea where it grew to no more than a metre in height. Further inland it grew up to about 4 m and was all but impenetrable, which made it difficult to cover some of the ground comprehensively, except where occasional goat or hunters' trails cut through it. In places the maquis gave way to forest, which was dominated by well-spaced pine (*Pinus brutia*), with cistus undergrowth.

Outside the forest boundary the land in TZ1 was divided between rough grazing and cereal crops, which was also the case in TZ2. The grazed areas were often planted with olive and carob trees in straight, well-spaced lines. In TZ2 the lower slopes, in the west, tended to be given over to rough pasture whilst higher up, closer to the villages in the east, wheat and barley were grown in the larger, more accessible fields – smaller, steeper plots, even quite close to the villages, had been abandoned. It was impossible to survey fields planted with cereal crops and where these fell within a grid square I had to be content with recording the current land use.

Around 600 m, in TZ3, vines were the main crop; under the right ground conditions visibility in the vineyards was reasonable and they yielded moderate amounts of pottery. Between the vineyards was the occasional field of wheat or potatoes; impenetrable fennel, growing to well over 2 m in height, was common on abandoned plots at this level.

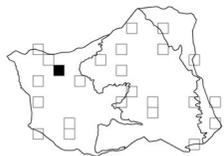
6.1 Grid Squares and Settlement Evidence

Data were collected in the Peyia area in 24 grid squares, GS001-GS021 and GS031-GS033; nine, eleven and four squares in TZ1, TZ2 and TZ3 respectively. They are grouped here by topographical zone and presented in numerical order. The distribution of the squares was fairly uniform, meaning that no significant area was underrepresented in the survey.

Dating structures found in the Peyia survey area was problematic; seldom was any pottery found in indisputable association with a building. Based largely on their state of preservation, and on such pottery evidence as was available, I have assumed that most surviving structures in the area were built during the Ottoman period. Whilst I make this assumption, it is clear that many of the structures were used well into the 20th century, and it is equally likely that many of the sites were occupied before the arrival of the Turks in the 16th century.

6.1.1 Topographical Zone One – TZ1

GS001



Peyia TZ1
439500 / 3866000
14-16/iv/03

SE0001 Enclosure	SE0004 Material Culture
SE0002 Structure	SE0074 Enclosure
SE0003 <i>Mandra</i>	

The road from Kato Arodhes to the coast crossed this square, deteriorating as it went, with some extremely rough and hazardous stretches in the middle section. The square fell across the Peyia Forest boundary, inside which was thick maquis where it was impossible to see more than a few metres in any direction. The only relief was from the occasional goat or hunters' trail that cut through the vegetation offering a clear passage. Outside the forest boundary rough grassland, planted with olives and carob trees, was frequented by itinerant goats.

In the west of the square, in a clear patch amongst the maquis at Kato Arodhes *Kandjellin*, there was a slight concentration of pottery (SE0004). The limestone bedrock, which showed through the grass and juniper bushes, had broken down to pebbles in places, and amongst these were a few pieces of coarse, weathered pottery and a single piece of chipped stone. The pottery included fragments of Bronze Age red polished ware and the stone was, possibly, a utilised blade of Lefkara chert. Two other lithics – probably flakes of Lefkara chert – were found elsewhere in the square, but only one other piece of medieval to modern pottery. None of the material was associated with any of the recorded structures.

Settlement evidence recorded in the square suggested a past of agriculture and animal husbandry; the domestic olives and carob trees supported this, although they were of no great age and probably attest to continued use of the land, as did the functioning well with concrete surround and rusted metal cover. In the southwest of the square at Kato Arodhes *Gaidhouromandres* on a small, flat area just outside the forest a small ruined structure (SE0001), measuring 5 x 5 m, had been built against an undercut limestone outcrop. It appeared to have been a

small animal enclosure – the donkey pen for which the locality is named, perhaps.

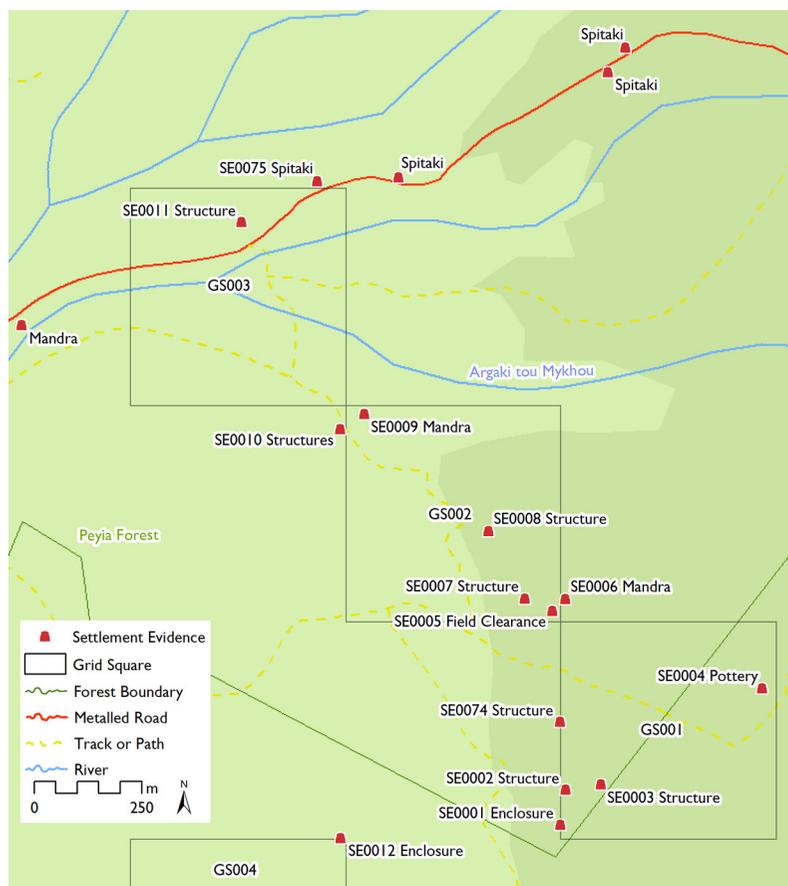


Figure 6.2 GS001, GS002 and GS003 showing SERFs.

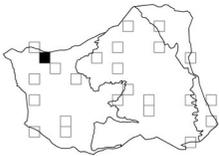
Some 100 m to the north of SE0001 stood the remains of a well-built structure (SE0002); it stood on a limestone outcrop between two flat, once-cultivated areas, surrounded by terebinth, spiny burnet and thick grass. The structure was built into a gentle west-facing slope and looked down over an open area of carob and olive trees, which gave way to maquis and then the sea. Its walls survived intact to roof height – standing approximately 1 m tall at the rear and 2 m at the front – although no sign of the roof remained. Its internal measurements were approximately 5 x 5 x 2 m. The walls were solidly built with large limestone blocks that were unworked except in the quoins, with stone chinking and mud bonding. Over the door in the west wall was a lintel of unworked wood.

One hundred metres east of SE0002 stood SE0003 – an abandoned *mandra*. The walls were all of rough block, dry-stone construction and the roofs a combination of wood/earth and flattened oil-drums. The *mandra* consisted of one roofed structure with two contiguous enclosures, one of which was partially covered. Many of the walls were ruined and thick grass grew within the enclosures. Wild barley, nettles, gorse and terebinth surrounded the structures, particularly to the west; and a large terebinth all but blocked the door to the main building. Clearly the *mandra* was disused, but the machined wood in the doors and their frames, added to the surviving roofs and some scattered modern detritus, would suggest no great antiquity.

Just outside the square to the west stood two or three derelict structures. These were partially enclosed by a broken down wire fence and the main one still had a roof, which incorporated plastic sheeting, and a sound door secured with a shiny new padlock. The derelict oven on the eastern end of the buildings suggested

some permanent or at least long-term occupation in the past. On a flat, open area just outside the forest boundary, 50 m or so southeast of the buildings, and presumably associated with them, was a ruined, long-abandoned sub-rectangular enclosure (SE0074).

GS002



Peyia TZ1
439000 / 3866500
17/iv/03

SE0005 Field Clearance	SE0008 Structure
SE0006 <i>Mandra</i>	SE0009 <i>Mandra</i>
SE0007 Structure	SE0010 Structures

The flat, open grassland on the east side of this square was dotted with limestone outcrops and small caves, most of which were obscured by terebinth. The entrances faced in all directions and there were no clear signs that they had been cut out of the rock. Across one entrance were the remains of a rough wall, which appeared to be associated with animal husbandry rather than the care of the dead. Thick grass reduced ground visibility and there was some background confusion from flat, red stones, but even so occasional, isolated sherds were found – these, unfortunately, were coarse, weathered and unidentifiable.

The west of the square was dominated by agriculture, and barley fields prevented access to some areas. Inaccessible and unrecorded, two large, rectangular buildings of rough worked stone, stone chinking and mud bonding stood in one

of the fields. One still sported the remains of a traditional reed and mud roof. These buildings, and the threshing floors marked near them on the cadastral plan, were clearly associated with those in GS001. The gentle slope and the breeze up from the sea make this an ideal location for growing, threshing and winnowing cereals.

In the southeast corner of the square, in Kato Arodhes *Appiourka*, amongst domestic olives, carob, terebinth, thick grass and clover, was a broad concentration of strewn limestone rubble and small cairns, probably comprising field clearance (SE0005). The area yielded some Ottoman to Modern tablewares and one or two pieces of smooth, igneous, possibly worked stone. The field clearance lay close to the break in slope between a *mandra* (SE0006) to the east, and a single structure (SE0007) associated with the fields to the west.

SE0006 was mostly derelict, consisting of three structures and two large enclosures. It stood in a flat, open area amongst terebinth bushes, just above a small step in the slope, with views down to the sea in the west.

One of the structures was still sound with a roof and locked door; its walls incorporated worked stones, stone chinking and mud bonding. A disused oven close to this structure and the neglected domestic olives nearby were indicative of long-term use in the past. The other two structures, without doors, had collapsing roofs and their walls were largely of unworked stones, although still with mud bonding; they were probably animal shelters. The enclosure walls were mostly of rough, dry-stone construction, although some showed signs of mud bonding. An undercut outcrop had been incorporated into one of the enclosures; the entrance

was blocked, but it might once have been used as a shelter. An unaimed photograph taken of the interior shows an arched roof, which could have been part of the barrel vault of a Roman tomb, the current entrance being a hole in the roof rather than the original dromos.



Figure 6.3 Entrance and interior of underground chamber (SE0006).

Very little pottery was visible amongst the thick grass that covered SE0006, but two Late Roman transport amphora handles were found. They were clearly not contemporary with the structures, but might have been associated with the tomb, if that is what lay beneath the outcrop.

The single derelict structure (SE0007) to the west of the field clearance (SE0005) stood just below the step in slope. Open, agricultural ground sloped gently away to the coast in the west, but rather than looking out across it the building was aligned so that its single door, in one of the long sides, faced south. Perhaps this

was to make the most of the sun's heat and light or perhaps to avoid the sea breeze – stiff at times – from blowing straight into the house, both of which might suggest the building was used seasonally. The structure was rectangular and measured 11 x 5 x 2 m on the inside. Its walls were built from rough stone blocks, although larger, worked blocks had been used in the quoins; the roof was of wood and mud construction, and the door lintel of unworked wood. A little pottery was found nearby, notably a fragment of a figure decorated sgraffito bowl, possibly made from a Paphian fabric. It was probably medieval, appearing to date from no later than the 14th century.



Figure 6.4 Sgraffito (SE0007).

A rough stone jacket, approximately 1 m deep, was built around the west-facing walls to about half their height; this may have been added protection against wind off the sea, but it was also a convenient place to dispose of the considerable amount of field clearance in the vicinity. Just to the west of SE0007, three parallel lines of heaped stones, up to 5 m wide, all met a fourth, roughly perpendicular line; they enclosed what could once have been small fields, but these areas themselves are now thick with small rocks and suitable only for rough pasture.



Figure 6.5 Structure (SE0007). Rough stone jacket visible to left of picture.

Just to the north of the linear field clearances was a second rectangular structure (SE0008); it was in a similar location to SE0007, but there were noticeable differences in its construction. SE0008 was smaller – 5 x 7 m – and had no roof or rough stone jacket. The walls, despite being more dilapidated, were better constructed – still of rough stone, but with mud bonding and stone chinking.

Inside, toward the west end, was a small ‘table’ built of rough stone and mud bonding, measuring 0.5 x 1 x 0.5 m.

At Kato Arodhes *Magoulas* stood a derelict *mandra* (SE0009) consisting of one two-roomed structure, and a separate complex of two or three shelters attached to a large enclosure.

One of the main structure’s two rooms was roofed and the other contained the charred remains of roof timbers. The door lintels were handworked and the walls of large, unworked limestone blocks with stone chinking and some mud bonding. The shelters were similarly built, and butt joints between some of the walls suggested more than one phase of construction; the enclosure wall was a rough, dry-stone construction. Close to the shelters stood an oven. The whole complex was covered in thick grass, nettles, and terebinth. The *mandra* sat on the edge of high ground, which sloped down toward the Argaki tou Mykhou (stream of myth) to the north. Another *mandra* was visible almost directly across the river, and others along the road leading up the ridge opposite. One more gorge away a modern *mandra* was visible, and the noise of goats and their herders from all directions were testament to continuing pastoralism in the area.

To the southwest of SE0009 the ground sloped down over fields and rough pasture to the sea. Just below a small step in the slope, some 50 m west of the

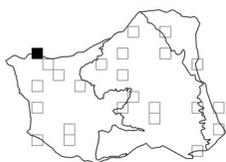


Figure 6.6 Stone built ‘table’ (SE0008).

mandra, at a junction in the track, were two ruined structures (SE0010). They were well built from rough worked stone with mud bonding and stone chinking and stood to about roof height, but no sign of the roofs remained. The two structures faced each other and, once more, none of the doors took advantage of the views downslope toward the sea. Just downslope of the buildings, across the track, was some rough terracing using very large, clumsy rocks; it appeared that someone had taken advantage of boulders that they could not move rather than chosen them specifically for the purpose.

It appeared as if the structures in GS001 and GS002 comprised a loosely knit agricultural settlement. The surviving structures probably date from the late Ottoman or early British period, but the small amount of medieval pottery and the possibility of Roman tombs imply that the area was long favoured for occupation and exploitation of one sort or another.

GS003



Peyia TZ1
438500 / 3867000
18-19/iv/03

SE0011 Structure
SE0075 Small structure

The concrete road from Inea to the coast enters the square at its northeast corner and loops through its northern third before leaving at its northwest corner. The Argakin ton Khiromandrikon (stream of the pig pens) runs alongside the road,

before joining the Argaki tou Mykhou in the west of the square. Between the rivers, particularly on the south side, there were clear signs of them bursting their banks – washed out stretches of bank, and abandoned rubble and boulders; despite this both rivers were all but dry in April. The rivers were lined by impenetrable gorse, juniper and terebinth, and away from them fields of barley and wheat covered much of the southwest and the northwest of the square.

In the southeast corner of the square a mixture of limestone and basalt field clearance had been used to construct retaining walls, field boundaries and revetments around the few domestic olives that grew there. Further up the slope, just below its crest was the small entrance to a cave – it was impossible even to see in, and unaimed photographs of the interior gave no clear indication of its shape. On a small ploughed patch 50 m downslope there was a noticeable, if sparse, scatter of pottery, which included a handle fragment from an early Roman imitation of a Koan transport amphora.

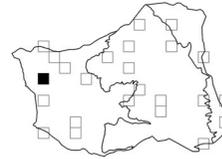
About halfway up the western side of the square more linear field clearance marked out, without fully enclosing, three or four plots amongst the domestic olives. Some of the lines acted as rudimentary check dams, but the haphazard nature of the piles suggested that this was not their primary purpose. More were built on the sides of the gently sloping ridge between the two rivers; none stood more than about 0.5 m (3-4 courses) high, but some stretched up to 15 m in length. The situation was similar in the northwest of the square at the foot of the slope leading down to the Potamos tis Elin Petras (river of olive stones), where occasionally the walls rose to a 1 m in height. Some smaller walls were built on the slope between the road and the river in the northeast of the square. All of

these field boundaries and soil retention measures were derelict, and many almost destroyed by the heavy goat-traffic through the area.

In the north of the square at Kato Arodhes *Mesonisia* a derelict field house (SE0011) stood on the edge of a combined olive grove and barley field. Flat basalt slabs had been incorporated into the walls, particularly around the door, amongst the predominant, rough limestone blocks. There was some coarse chinking and mud bonding in the walls and the remains of a layer of plaster or mud on the interior. To either side of the main structure, which measured 7 x 4.5 m, were 7 m long shelters, which consisted of mud roofs supported on unworked posts and beams. The main building had been dug into the ground, as well as into the slope, so that its interior height was almost 2 m whilst its collapsing roof and those of the shelters were level along their whole length.

To the north of the road in the east, just outside the square at Inea *Angonoës*, on the ridge between the Argakin ton Khiromandrikon and Potamos tis Elin Petras, stood a small, rough-built structure of basalt slabs (SE0075), with some mud bonding in the walls. It measured 5 x 4 m and the lintel across the door at 1 m suggested that it was never much taller than this. A more dilapidated enclosure had been added to its western end and extended its width by a further 5 m. This seemed to be the last in a line of similar, although mainly larger, basalt block *spitakia* that were built close to the road between Inea and the coast; they are considered further in the discussion section of this chapter.

GS004



Peyia TZ1
438500 / 3865500
20-21/iv/03

SE0012 Structure

The Argaki tis Trypimenis (stream of the hollow) crossed this square from the east where it ran through a gorge with steep, unstable sides that were covered in impenetrable shrubs. In the west of the square, by contrast, it was possible to cross the riverbed without realising you were doing so. The riverbed itself was dry and overgrown and its course all but impossible to see, except where fleshier, leafier plants grew near to the middle of the gorge. The thick vegetation made survey of the gorge itself impractical, but the ground on either side of it was covered.

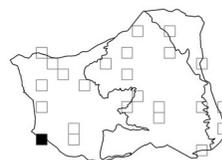
North of the gorge in the east of the square the ground climbed up through open juniper and terebinth interspersed with patches of grass and asphodel, to a limestone outcrop, big blocks of which had split away, leaving large gaps and fissures. Against the outcrop – at Peyia *Gaidhouromandres*, approximately 500 m west of the concentration of settlement evidence in GS001 – was a small, ruined, amorphous enclosure, approximately 5 m across (SE0012, Figure 6.7). The rough blocks of limestone and conglomerate were particularly large on either side of the doorway.



Figure 6.7 Small structure and detail of conglomerate block in wall (SE0012).

On the flat ground to the south of the gorge pottery was relatively abundant in the thick maquis. There were one or two noticeable hot spots toward the west of the square and a noticeable increase in the western 100 m, where the vegetation was occasionally kept in check by loose rocks and stones; despite high background confusion from red stone, red and yellow leaves and lichen, sherds were far more visible here. The pottery was mainly coarse; some pieces of *pithos* were identified, and Roman amphora and tableware fragments, as well as Ottoman coarse ware. Several sherds from a single vessel that might have been Ottoman, but was probably modern, still lay where it had been broken in one of the clearer patches. Given the location and the number of sherds it is unlikely that this was evidence of a settlement site; it is more likely to have been an isolated potburst.

GS005



Peyia TZ1
438500 / 3863000
22/iv/03

SE0013 Structure

This square was dominated by the Potamos Aspros (white river) gorge, which occupied much of its northeast half. The bottom of the gorge was accessible, but upstream of the road that looped through the northwest corner of the square it was occupied by the White Water restaurant and assorted animal pens. Downstream of the road the gorge broadened into a wide, flat grassy area leading to the beach. This area was very disturbed by picnickers, rubbish tippers, the road, and also by the Aspros itself, which would appear to run down the southern edge of the gorge with considerable force when it is in spate. In April it was bone dry.

Upstream of the square the north side of the gorge became less sheer before flattening out altogether. All along this side was evidence of previous and continuing use: an animal pen under an overhang, the stonework of many terraces, retaining walls and field boundaries, and grassland planted with olive and carob trees sweeping away to the northeast.

A few, very weathered *pithos* sherds were the only signs of human activity found on the area of open scrub north of the gorge where the weathered limestone had decayed to something like holey cheese and made walking a trial. In the east of



Figure 6.8 Retaining wall on south edge of Aspros gorge.

the square a current rubbish tip added brick and tile to the moderate scattering of pottery that spread across the broad, sparsely grassed strip between the southern edge of the gorge and the Meleti forest. The pottery continued into the forest and most of it was Roman, including amphorae and Cypriot Red Slip ware. Despite increasing disturbance from building plots and almost bare bedrock the pottery continued, albeit still more sparsely, toward the southwest corner of the square

where a short, indistinct stretch of wall survived to no more than two courses. This could have either been the vestigial remains of a structure or an attempt to retain the topsoil.

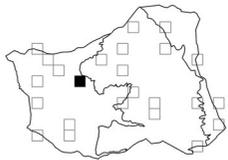
There were more retaining walls on the south face of the gorge (Figure 6.8). They may have been part of a track or road working its way up the side of the gorge, but the damage caused by the constant passage of goats made the situation unclear. The cadastral plan and Kitchener's (1882) map show no thoroughfares other than that which the current road follows, so it could be that the walls were in fact shoring up the cliff face, or creating small cultivable plots.

Toward the downstream end of the gorge – just outside GS005, at *Peyia Alimman* – a front wall had been well constructed from rough limestone blocks, creating a structure (SE0013) under the overhang of the cliff. Two windows were let into the wall, as was a door with a machined frame and handworked lintel. Further along the cliff to the east there were some signs of dry-stone walling against the cliff that could have formed animal pens. The smell of goat lingered inside the main structure, but there were no signs of current, permanent occupation. The barbecue pits on the bare earth forecourt enclosed in a rusting chain-link fence, with a broken gate, suggested that the *mandra* was no longer in permanent use, superseded perhaps by the modern structures behind the restaurant.



Figure 6.9 Abandoned *mandra* built into undercut cliff (SE0013).

GS006



Peyia TZ1
440500 / 3865500
23-24/iv/03

SE0014 Structure
SE0015 Structure

This square fell almost entirely inside the Peyia forest and was dominated by the gorge of the Argaki tou Petrou (stream of Peter), which occupied much of the southern third of it. The gorge began just inside the eastern boundary of the square, where it was possible to cross it on gently sloping, bare limestone, but it soon became extremely deep with sheer sides. The gorge was not surveyed. The forest was open, with frequent clearings between clumps of trees beneath which was a sparse undergrowth of cistus. Away from the trees, the moderately sloping limestone was weathered and broken, with occasional pockets of soil that harboured juniper and terebinth. The maquis reasserted itself further to the west, but never became as thick as in some earlier squares.

In the north of the square at Kato Arodhes *Muti tis Laras* a derelict structure (SE0015, Figure 6.11) stood above the Petrou gorge, in a clear patch in the forest at the top of a moderate slope. Measuring 5 x 4 m, it was of rough, dry-stone construction and stood 1.7 m tall where the walls were complete. The timbers supporting the partially collapsed mud roof were unworked, but the lintel over the door, which was wide and low (1.5 x 1.5 m), was machined. A large, flat clear area behind the structure could have been



Figure 6.10 Mud roof section (SE0015).

cultivated in the past, but there were no signs of either olive or carob trees in the vicinity. Most recently the structure had been used for storage, and old fleece, burlap sacks and a wooden stool stuck out from under the collapsed roof. The surviving portion of roof was extraordinarily thick – up to 0.5 m – and successive layers of mud and earth were visible in the section (Figure 6.10).

A low cave, approximately 1-1.5 m tall, and 7-8 m deep, beneath a bare limestone apron in front of the structure formed a natural cellar that must have been a factor in choosing to build in this location. The arched roof of the cave appeared natural, so it seems unlikely that it was ever a formal tomb; the small amount of pottery around the structure was unidentifiable and of no help either

way. The cave was probably used as an animal shelter, similar to SE0076. The land nearby and the breeze coming up the gorge would suggest this was a good place for small-scale agriculture, but there was no further evidence on the ground and nothing on the maps to suggest that this had been the case.

The small portion of the square lying to the south of gorge was largely open and covered in thick grass. There was no sign of human activity except at Kato Arodhes *Vlakhou* where a small, ruined *mandra* (SE0014, Figure 6.12) stood just outside the forest boundary, on bare limestone just below the crest of a steep slope planted with carob and domestic olive, between which grew thick grass,



Figure 6.11 Structure and undercut chamber (SE0015).

wild barley, plantains and meadow flowers. It looked down the gorge of the Potamos Avgas (egg carrying river). The walls of the structure and those of a small pen or room built on its front were of rough limestone with mud bonding, and a dry-stone enclosure was built on the western end of the building. The structure was built into the slope so that its back wall did not rise above ground

level, despite being 2 m tall inside. Low retaining walls ran along the slope to the east of the structure suggesting that some, small-scale cultivation took place here in the past. The cadastral plan shows a threshing floor some 300 m to the southeast, on top a small spur at Kato Arodhes *Vlakhou Kokkinokambos* (The Vlach's red field).

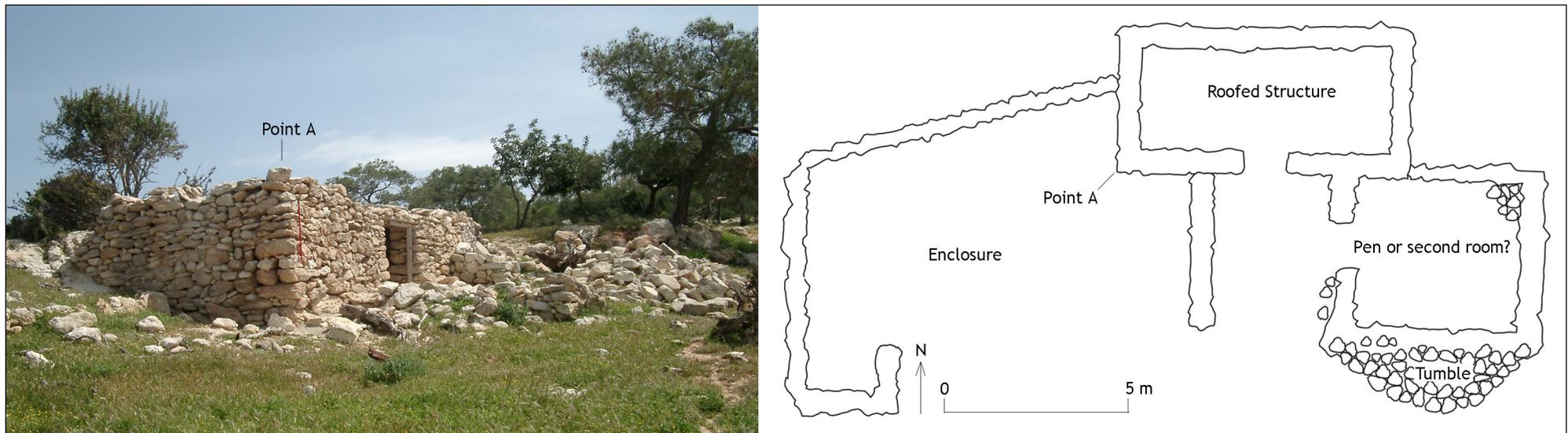
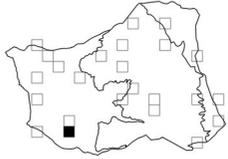


Figure 6.12 *Mandra* (SE0014) Photograph from southwest, and sketch plan.

GS007



Peyia TZ1
440000 / 3863000
24-25/iv/03

SE0016 Lime Kiln
SE0089 Structure

This square was covered in open forest; wide spaced trees and grazed clearings gave way to clumpy maquis with thin grass in limestone and gravelly clearings. Visibility was good on the grassy stretches despite the layer of moss and lichen through which the sparse grass often grew. Very occasionally there was a coarse pinkish-orange sherd amongst the grass, which had no identifiable characteristics. Just outside the square, to the east at Peyia *Kalamoulli*, was a ruined kiln (SE0016), with dry-stone walls built up around a circular cut into the bedrock. The overall the depth of the cut was 2 m with a diameter of 4 m, with a 1 m wide, 1 m deep step inside it. The walls had collapsed into the cut and seldom stood above 1 m.

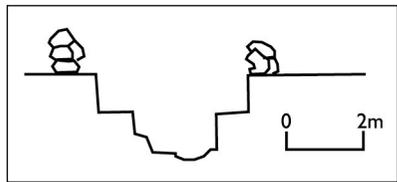
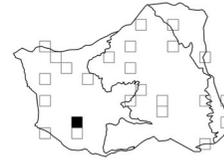


Figure 6.13 Cross section of kiln (SE0016)

Marked simply as a 'kiln' on the 1:5,000 topographical map, SE0016 was close to a track some 100 m from the forest road. Given its location, the surrounding vegetation and the underlying geology it was probably used for the production of lime or pitch, rather than pottery; its size

suggested that lime was most likely. A high ring base fragment found nearby indicated at least some pre-Roman activity, but there was no evidence that clearly dated the kiln.

GS008



Peyia TZ1
440000 / 3863500
25/iv/03

SE0017 Structure	SE0087 <i>Mandra</i>
SE0018 Structure	SE0088 <i>Mandra</i>
SE0069 Structure	SE0092 Church

The northeastern third of GS008 was inaccessible due to the gorge of the Kalamoulli Potamos (Kalamoulli river), which at this point was 80-100 m deep. The area that was accessible was within the forest boundary, but ground cover was much more open than in GS007. Between the trees and shrubs thin grass grew on sparse patches of red soil that had collected across the uneven, weathered limestone.

One hundred metres apart, in the east of the square at Peyia *Yiros tou Stavrou*, two odd little structures (SE0017, SE0018) had been built on the very lip of the gorge. They were both of rough, dry-stone construction, approximately 6 x 2 m and built against a natural step in the bedrock, which formed the back wall. It is hard to know why they had been built in such a precarious position; it seems unlikely that livestock would have been kept in such proximity to such a high

cliff, but SE0087, clearly a *mandra*, was as close to the edge as these were. Further to the west, just outside the northwest corner of the square at *Peyia Yiros tou Stavrou* was another small, rough structure (SE0069). It was a similar size, but sat amongst juniper bushes on a steep limestone slope, between two flatter areas, some distance from the lip of the gorge, which was, in any case, rather less severe here. SE0069's situation was ideal for a field shelter, but SE0017 and SE0018 would not have looked out over any fields associated with them, even if the flat land behind them was cultivated before the forest was established.

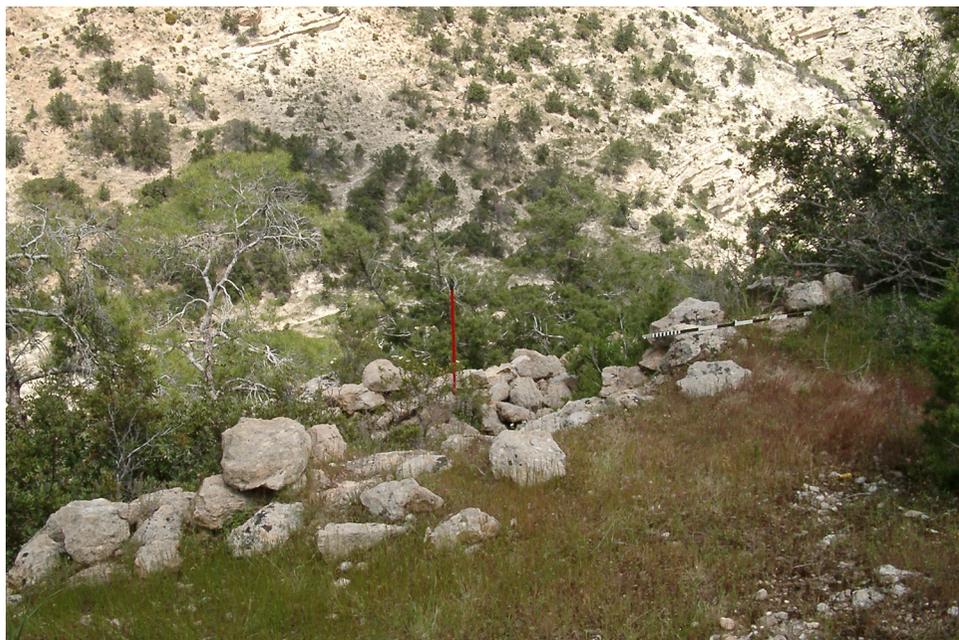


Figure 6.14 Small structure on the lip of the Kalamoulli gorge (SE0017). Red scale on far wall is 1m.

The Peyia Survey Area

SE0087 and SE0088, both abandoned *mandres*, sat outside the square to the east, at *Peyia Paleomandres* on the northern edge of a wide flat area between the *Aspros* and the *Kalamoulli*. SE0087 was built right on the edge of the gorge, in a clearing in the *maquis*; two or three rectangular structures had been built into the slope of a hill using rough-hewn blocks of limestone, and at least two larger enclosures used the same step in slope for a back wall. Goats had recently used two nearby, low caves, but there was no sign that the entrances had ever been walled up, or the spaces used as pens. Revetments and terracing on the wide flat area in front of the enclosures were perhaps indicative of some form of cultivation.

SE0088 had similar enclosures built against a step in the limestone on the edge of a short, shallow gully. A single rectangular structure stood above one end of the gully which itself was crossed by four check dams (Figure 6.15). The structure was built of rough-worked limestone blocks between which there might have been some mud bonding. About half of the flat, mud roof remained intact, and all but one of the timbers in this and over the door were hand-worked. A few very worn, coarse sherds were found around the structure and one *pithos* fragment in a small, ruined structure on the opposite side of the gully.

Although pine, juniper and spiny burnet encroached around the top of the high ground, the flatter areas were open, and covered in grass. A row of olive trees, none of which appeared to be more than 50 years old, had been planted up the centre of the gully – one to each check dam – and carobs had been planted along its southern side. Broad shallow terraces planted with carob trees continued to the south.

Between SE0087 and SE0088, several paths came together from the south, east and west; amongst these was a track, marked on the 1:5,000 topographical map but not visible on the ground, that ran along the edge of the gorge before turning, close to SE0017, to run down into the gorge and end close to the river.

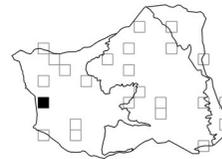


Figure 6.15 Gully and check dams (SE0088).

Some 500 m to the west of the square stood Stavros Church (SE0089). Marked on the 1:50,000 map as a ruin, this small church had been recently renovated and

the worked limestone of its walls was in excellent condition. It sat at the top of a small gully overlooking sea, with Lara promontory visible to the north; the view to the south was obscured by high ground. The gully had several tall check dams built across it and much of the land close to the church was cultivated – carob and olives to the north, and bananas to the east. Fifty metres to the east of the church was the broken, lower stone of an olive mill; evidence perhaps of long-term olive production in the vicinity. Despite the recent work that had taken place at the church, there was no obvious sign of an access road, and none of the maps even have a track or path marked. Whilst it seems to have stood amongst fertile, cultivated land, this church was perhaps intended to be seen from a distance, and only visited by conscious effort. This positioning is characteristic of Stavros (Holy Cross) churches as it is reminiscent of Calvary; Stavros church (TP033) in the Nikitari area is, similarly, at the top of a hill.

GS009



Peyia TZ1
438500 / 3864500
26/iv/03

A small part of this square, in the west, lay between the beach and a low cliff. From the top of the cliff about half of the remainder of the square was under short, thick maquis, whilst the rest was completely inaccessible behind a fence and under arable crops and fruit trees and olives.

The strip between the cliff and the beach was very sandy and very disturbed by traffic; I found a single Cypriot Red Slip rim fragment amongst the plentiful airbrick in the loose sand.

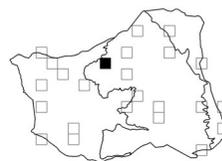
Toward the north of the square, on top of the cliff, the soil grew thicker and darker, and the juniper and terebinth became too dense to penetrate. In the south of the square the soil was thin and red and collected in pockets on the weathered limestone; a small amount of coarse, unidentified pottery was found in this area. Also in the south of the square, on a rectangle of roughly cleared ground was an intriguing piece of weathered limestone. Given the condition of the surrounding bedrock, it was probably just a piece of background confusion, but it could have been a tile fragment, or a fishing weight.



Figure 6.16 Stone tile fragment or background confusion?

6.1.2 Topographical Zone Two – TZ2

GS010



Peyia TZ2

441500 / 3866500

29/iv/03, 11/v/03

SE0019 *Mandra*

SE0022 *Spitaki*

SE0020 *Mandra*

SE0076 *Mandra*

SE0021 Structure

This square fell across the watershed of several tributaries to the Argaki tou Mykhou. The dry gully of one of them ran northwest from close to the centre of the square; its north facing slope was sheer, broken limestone, densely covered with thyme, and medium height gorse and terebinth – it was quite impossible to survey. The limestone in this square was far chalkier than that encountered nearer to the coast. In the very west of the square the slope relented sufficiently for one pass up it. Where it had been particularly worn by the passage of goats, the slope was scattered with small pieces of unworked chert, eroding out of it. A very few small, coarse, unidentifiable sherds were found on these unfavourable surfaces.

Toward the middle of the square, several, short terraces had been built on the steep slope, and most were planted with carob trees. The walls were well made with flattish unworked pieces of limestone and, in some places, were 2 m tall. A low retaining wall of very rough, dry-stone ran along the break in slope and

above it the ground was covered in thick grass and uniformly planted with carob trees.

The southwest corner of the square fell inside the Peyia Forest; the ground cover was open pine, with low to medium terebinth, thyme, gorse and cistus undergrowth and zero visibility due to the carpet of pine needles. Nevertheless a few thin, nondescript coarse sherds were found on and near a track running along the forest boundary whose surface was scraped bare by goats and the weather.

On the flat ground in the southern half of the square, at Inea *Phournaris*, were three very different *mandres* (SE0019, SE0020, SE0076) that were all, to some extent, still in use despite their proximity to the forest boundary. SE0019 was large and consisted of two enclosures that incorporated covered shelters. One of the enclosures was clearly still used for penning sheep and goats from time to time, and the other had a forest boundary cairn built in its southwest corner. The walls were built from rough limestone blocks, in one place augmenting a natural step in the bedrock, and those still in use had dried gorse and thorns fixed to the top for added security.

East of SE0019 the ground underfoot was more broken, and thyme and spiny burnet replaced the thick grass; the carobs here seemed more neglected, and an occasional pine intruded from the forest. Beside the track in this part of the square was a small enclosure (SE0020) that was occupied by a handful of sheep and kids. The dry-stone of its walls suggested that it was not entirely modern, but the wooden pallets and flattened oil drums with which it was mended attested to more recent work. It too had cut gorse along the top of its walls (Figure 6.17).

Northwest of SE0020, toward the gorge, was a *mandra* that incorporated a low cave as a shelter for the animals. A hollow in front of a deeply undercut outcrop was partially fenced with chain-link and dried gorse; the enclosure showed signs of fairly recent but not regular use. The undercut ran in for several metres and was empty but for the decaying remains of a kid. The roof had collapsed in one place and afforded a reasonable view of the interior; the cave was low with a shallow curve to it that appeared to be natural.



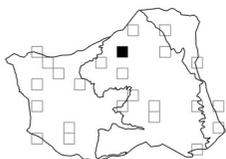
Figure 6.17 Stone walls with thorn topping (SE0020).

Just off the top of the ridge above the valley, a 2 m natural step in the bedrock formed the back wall of a structure (SE0021) built from large, rough blocks. The east end survived to about 4 courses (1 m tall), whilst the west end had largely tumbled and filled the interior of the structure. It was not associated with any

other building and was, perhaps, a *spitaki*; it was not unlike the two structures above the Kalamoulli gorge (SE0017, SE0018), although smaller – only 2 x 2 m. In the north of the square, below the steep slope, was a mixture of rough pasture, low grass, spiny burnet, terebinth, almond and carob. There were ploughed plots – some with marked boundaries – large, modern terracing and bulldozed bedrock. Just inside the cultivated area in the north of the square – on ploughed ground between old carobs and young almonds – was a roughly covered well. Against the west side of one of the field boundaries on the north-facing slope above the valley was a ruined *spitaki* (SE0022). Measuring 5 x 5 m, it had a 1 m wide door in the north end; the interior was full of collapsed roof and walls, and asphodel. Amongst the tumbled stones were signs of mud that could have come from bonding in the walls, or from the roof.

Just outside the square, to the north of the road were two dry-stone field shelters, one with a flat mud roof and the other open to the elements. They were abandoned, derelict and completely inaccessible due to thick nettles growing to over a metre in height.

GS011



Peyia TZ2
442500 / 3867000
30/iv/03

SE0023 *Spitaki*

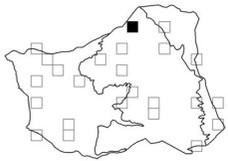
This square was on the southwestern slope of the upper reaches of the Mykhou drainage. The moderately sloping ground was covered in grassy scrub and pasture with spiny burnet at ankle height, clumps of gorse and occasional cultivation of wheat, barley, vines, carob and almond. Where the ground was cultivated, the field boundaries and terracing was clear, but much of the land marked out was abandoned or unused. Vineyards ranged from abandoned slopes to very tall, deep, blindingly white, newly planted terraces cut into the limestone bedrock. Such watercourses as there were in the square were choked with thick, impenetrable grass laced with thorns.

In the middle of the square, toward the north at Inea *Lioyiros*, a *spitaki* (SE0023) had been built into the gentle, north-facing, slope of a barley field above the valley. Now ruined, it had been built of rough, flat slabs of limestone with no bonding between them; the walls stood less than 1 m high and enclosed a space of 4 x 4 m. The barley crop around the structure was too threadbare to have been planted as a harvestable crop and was thick with daisies; in and around the shelter grew fennel, spiny burnet, wild olive and an almond tree. A well was marked on the cadastral plan, but not identified on ground; it was possibly near the retaining wall built 60 m to the north of SE0023.

There was more pottery in the east of the square, not least because toward the west more of the slopes had been recently cut back to natural soil with new terraces that made progress difficult and rendered the ground sterile. In the northeast of the square on north- and west-facing slopes there were many isolated sherds and occasional, small concentrations on broken or weathered ground, where seasonal streams had obviously scoured the slope.

Near the middle of the square in the east is a locality is called *Spilaea* (caves/tombs); the pottery could have been drifting down the slope from tombs, which had been looted in the past or destroyed by terracing. Further west in the square there were what could have been cave or tomb entrances in a low cliff, near the top of a steep slope. The holes were overgrown and all but earthed up; it was impossible to tell if they were natural alcoves or constructed entrances. There was no sign of pottery around them, and material further down-slope was very worn – some of it may have been Hellenistic, but there were also coarser pieces of Ottoman to modern wares in the mix.

GS012



Peyia TZ2
443000 / 3868000
1 & 11/v/03

SE0077 Structure

This square was right at the top of the drainage of the Argaki tou Mykhou. The road from Inea dipped down, before climbing back up to a crossroads at the centre of the square, right on the break of slope. The western branch was too steep and rough to be viable for motor transport, and was probably a vestige of pre-mechanised days; a diagonal from the north branch now joins up to the western track once the slope becomes more moderate. There was some cultivation in the square, but most of the ground was covered in rough pasture with very poor visibility; what little pottery there was could have come from any time since the medieval period. There were many outcrops of rock in the square,

particularly above the break in slope, but none so large as the two at Inea *Alikou* that dominated the landscape.



Figure 6.18 Continued land use – modern animal enclosure with ruined structure (SE0077) in foreground.

Southeast of the road at Inea *Kato Alikou* sat an enclosure that housed an assortment of animals and a variety of rusting farm machinery. It was mainly

constructed from corrugated iron and wire fences, but one rough, stone enclosure suggested that a similar establishment had been on the site prior to the advent of these modern materials. Across the road, at the foot of the huge outcrops were the remains of a small structure (SE0077). It was rectangular (7 x 4 m) and roughly built; much of the tumble around it was probably field clearance, added since its abandonment. It was raised up about 0.75 m, due, presumably, to continued working of the ground around it.



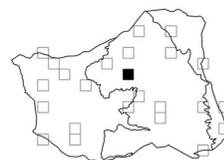
Figure 6.19 Ruined structure (SE0077).

Rough, dry-stone terraces, check dams and boundary walls marked out small fields amongst the pasture. The terraces were more numerous in the west of the square where the ground sloped down toward the coast; there were even check dams between and around the two huge outcrops. A spring, marked on the map,

was visible on the ground by the thick green grass close to the southern of the two outcrops. The culvert built under the concrete road suggested that there is still a reliable supply of water to the fields in this area.

Just outside the square to the west was a rough circle of stones, standing about 0.5 m high. It was too haphazard to be called a wall, and there was a wide gap in it to the north; it was not terracing or a check dam, but could have been rudimentary pen, or perhaps just exotic field clearance.

GS013



Peyia TZ2

442500 / 3866000

2/v/03

SE0024 Structures

SE0078 Structure

SE0079 *Spitaki*

SE0080 Pen

A cliff cut across the southern half of the square from southwest to northeast. The ground was broken, crumbling limestone with a dense covering of gorse, spiny burnet and terebinth; it was scaleable, but too steep to survey. A fenced off area enclosed a potato field and some deep, broad and newly planted olive terraces, only recently cut into the cliff. South of the rough road that ran along the base of the cliff older, gentler terraces had been built on the sloping ground that led down to the Avgas; they were planted with olive, carob and some very large almond trees – 4-5 m high and up to 0.3 m in diameter.

A track left the road to climb the slope and ended at the recently cut terraces, fenced. The cadastral plan showed the track continuing to the top of the slope, and indeed it reappeared beyond the modern cultivation, albeit in a very rudimentary form. The track passed two revetments with carobs planted behind them; these, and small terraces built on the cliff in the northeast of the square, suggested that the slope was considered far more accessible in the past.

At the top of the track, below the last 12-15 m of cliff, was a large, flat area covered in thick grass and asphodel – a sort of mezzanine level (Figure 6.20). There were several domestic olive trees, carob and signs of terracing, as well as the remains of two structures (SE0024). The village boundary runs along the top of the cliff, and it is not clear quite where this SERF sits, but it seems on balance to be at Kato Arodhes *Plevra tou Vouria*. The grassy area continued along the contour to the west, becoming narrower and rockier until it petered out around the edge of the square. There did not appear to be any easy access to this level, yet there were clear signs that goats had visited, and two resident cows sat beneath trees in the southwest corner.

The two structures stood below the final step in the cliff, and each measured approximately 6 x 3 m. They were built from rough, dry-stone and incorporated large standing or tumbled natural blocks. Unusually, the short ends of both were rounded. There was considerable background confusion from cliff-tumble, but despite this several stretches of retaining wall and revetments around some of the trees were easily identified, although in places what appeared to be walls could simply have been field clearance. There did not appear to be sufficient construction for the area to be a *mandra*, and the difficult access would also

militate against such a use. The cultivable land on this mezzanine, however, hardly warranted two *spitakia*; it is possible that they were associated with the flat ground on top of the cliff, but once again the structures would have been isolated from their land.

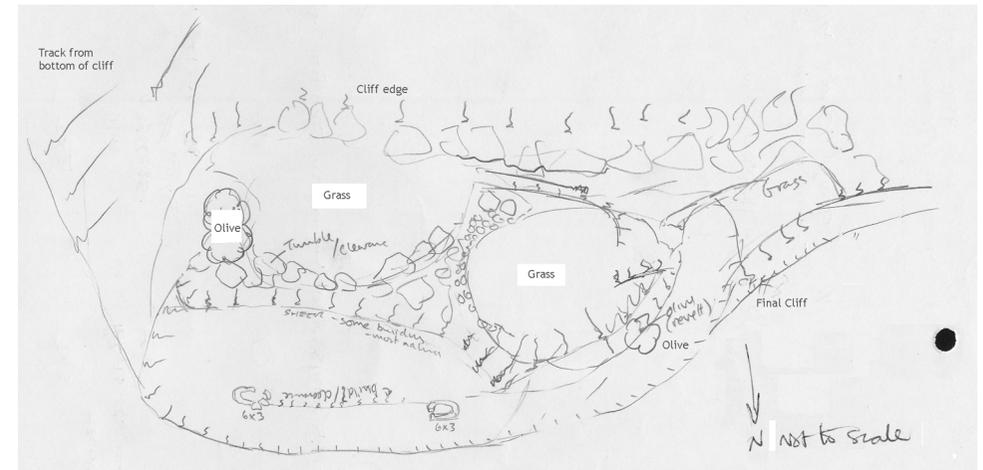


Figure 6.20 Structures and land use (SE0024).

At the top of the cliff a broad, flat area sloped down to the west, between the gorges of the Mykhou and the Avgas; thin grass, spiny burnet, thyme, asphodel, thistles, gorse, carob and a few olive trees grew between loose rocks on hard, red earth. Several structures, some low, rough and largely overgrown terraces and field boundaries, and some substantial field clearance were the remnants of past cultivation. There was no sign of current activity, except for a modern, concrete-built *mandra* to the west of the square, and some rubbish tipping.

Three structures (SE0078, SE0079, SE0080) associated with the abandoned agricultural land were recorded. SE0078 sat just outside the square to the west at Inea *Teratsiaes tou Helipetti*; it is marked on the cadastral plan as a hut, although its size (6 x 4 m) suggests something more substantial than a *spitaki*. Much of the dry-stone construction had collapsed and there was no obvious entrance, although it was probably in the long, east-facing wall where it was broken down to the ground and tumble confused the issue.



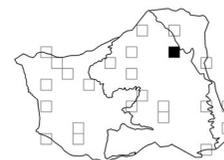
Figure 6.21 Ruined *spitaki* (SE0079). Red scale is 1m.

SE0079 and SE0080 were both in Inea *Skhistraes tou Pouzi*, the former in the north of the square and the latter 150 m to the southeast, close to the cliff edge. SE0079 was a *spitaki*, measuring 2 x 2.5 m, built against the end of a low terrace wall. Neither the wall nor the structure stood higher than 1 m and both were built

with rough, dry-stone, probably cleared from the surrounding ground; large clearance cairns standing nearby were up to 2 m in height. The structure had clear corners and an entrance facing east, although tumble and field clearance filled its interior and spilled out over the walls.

To the southeast of the square the ground grew rougher and batha reasserted itself before a natural, 2-3 m high step marked the beginning of the downward slope toward the cliff edge. In the northeast of the square the ground sloped toward the cliff in great tilted slabs of bedrock, fissured and split in such a way as to appear constructed in many places. SE0080 was built amongst this confusion; a rough, rectangular, dry-stone structure under a natural step in the rock, it measured approximately 6 x 4 m. The long walls, running parallel to the step, were very overgrown and tumbled so that the entrance was not clear, but it was probably in the east end. Like SE0078, it seemed too large to be a *spitaki*, and yet alone it could not constitute a *mandra*; it was possibly a seasonal dwelling for fieldworkers requiring something more extensive than a *spitaki*.

GS014



Peyia TZ2
444500 / 3867000
3/v/03

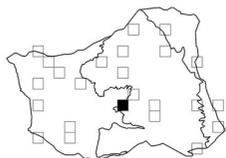
GS014 fell across a ridge at the top of the Avgas drainage, just below the watershed. The ridge was covered in rough pasture and spiny burnet, although at

either side of the square were terraced fields planted with barley and oats. Despite obvious signs that the whole hillside had been terraced and worked in the past, these fields, on the upper slopes, were the only ones that still showed signs of cultivation.

The gully in the northwest of the square was particularly well watered and, whilst none of the watercourses was running, the ground was often soft underfoot. There was, in the northwest corner of the square, surface water running down the slope below one of the cultivated patches. This could have been due to leaking irrigation pipes, but a passing shepherd told me there was a small lake further up the slope from this point, and the cadastral plan has a well marked in the vicinity.

Ground cover was thick, consequently visibility was bad and very little pottery found; one sherd, from the southeast of the square, with a rough, yellowish pattern on the outside was identified as Ottoman.

GS016



Peyia TZ2
442500 / 3864500
5/v/03, 13/ix/03

SE0025 Structure	SE0051 Structure
SE0028 Mill	SE0052 Mill
SE0039 Structure	SE0081 Structure
SE0040 Rock-cut holes	SE0082 Structure
SE0046 Structure	SE0090 Enclosure
SE0047 Structure	SE0091 Enclosure
	SE0050 Structure

This square lay in a pocket of rolling green just east of Pano Arodhes *Lipati*. Approaching from the east there were many signs of current use; a flock of goats wandered across the square, *mandres* were visible to the north, a modern, stone-built spring stood beside the road trickle-feeding a row of drinking-troughs. The road was of a good quality; its packed gravel surface had few potholes in it, which in itself spoke of continued use and recent renovation. The road crossed the bottom quarter of the square along the back of a ridge, rising toward Lipati in the west.

On the south flank of the ridge at Pano Arodhes *Meytelli*, the grass-covered ground sloped away, steeply at first and then more gently to plunge over the edge of the gorge of the Argaki ton Kouphon, south of the square. A 25 m broad strip running down the slope, perpendicular to the road, was drier than the surrounding

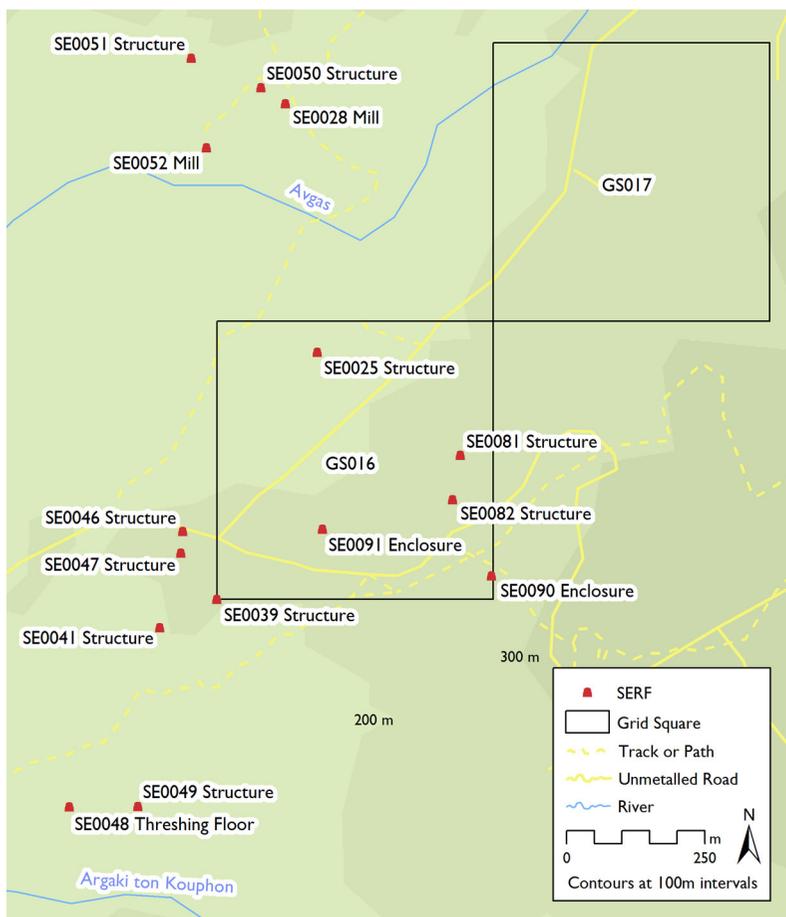


Figure 6.22 GS016, GS017 and environs, see also Figure 6.36 and Figure 6.26.

ground; the surface was almost completely bare of grass and large cracks were beginning to appear. There was a considerable quantity of pottery on this strip; mostly Ottoman to modern material, but also some dating from the 15th century onward, including cooking ware and sgraffito. A similar but smaller strip ran down the north side of the ridge for about 50 m, but it produced less pottery.



Figure 6.23 Ruined structure (SE0046) with view toward the ridge in the east of the Pezia survey valley.

There was medieval pottery as well as more Ottoman material around two structures (SE0046, SE0047) just to the west of the square. SE0046 was built toward the end of a small east/west spur with clear views up, down and across the valley, only blocked to the west by rising ground. It comprised two structures, built in line along the spur, right above the road as it began its climb up to Lipati. One was rectangular (3 x 6 m) and divided in two by an interior wall. The walls were made with rough blocks of dry-stone and stood less than a metre high. The second structure was very indistinct, surviving only as a wall-line at ground level; one long wall and half of each end wall was visible. The wall at the east end might have been curved, but it was impossible to be sure.

SE0047, a rough, dry-stone construction measuring 6 x 5 x 1.5 m (Figure 6.24), was cut into the slope below SE0046. It overlooked the gently sloping rough pasture that stretched toward the gorge in the south.



Figure 6.24 Ruined structure (SE0047) from above.

Another small structure (SE0039) was built into the slope below the road 100 m southeast of SE0047. It had rough dry-stone walls standing up to 1.5 m high and measured 2.5 x 4.5 m. It too overlooked the gently sloping land to the north of the Kouphon, where the decaying wall lines of disused fields were still visible.

Approximately 150 m southeast of SE0046, at the top of the slope below a limestone outcrop covered in loose blocks and field clearance, was SE0041. Two adjoining structures were built at the top of a large enclosed area, which sloped gently down to the west (Figure 6.25); there was a moderate amount of Ottoman to modern pottery in the enclosure. The smaller structure (5.5 x 5 m) had double skin walls made with worked stone, stone chinking and mud bonding; many of the stones had clear chisel marks on them. The walls survived to roof height in several places, but, beside remnants of it within the structure, the roof had gone. The interior height was approximately 2 m although the back wall stood only about 0.5 m above the slope. In one corner there was a small alcove with a single plank shelf still in place.

The structure abutting to the south (7 x 5 m) was solidly built, but with single skin, dry-stone walls; again, there were 10 mm chisel marks on the worked stones. There was no indication that this structure had ever been roofed. To the south of it at the end of a small spur, was a round flat area with rough retaining walls. No material culture was found there and perhaps it was, despite the ideal location, a small plot for cultivation rather than a threshing floor. Access would have been difficult, as its sides were steep, and it stood outside the enclosure wall.



Figure 6.25 *Mandra* (SE0041) from northeast, with detail of back wall and roof. The structures are at the top of a shallow, walled slope.

SE0041 was similar to many *mandres* found in the Peyia area (e.g. Figure 6.12); the structures were not at all unusual, but the enclosure they were attached to was some 200m long, which is much larger than any other recorded. There were several enclosed plots around SE0025, and it is possible that these and the walls at SE0041 were built to exclude wandering livestock from cultivated land. Alternatively, if the walls were intended to enclose livestock then the flock must have been enormous, or perhaps a smaller flock was kept there permanently and not taken out to graze.

To the west of GS016 the ground rose to Pano Arodhes *Lipati*, a large plateau between the two gorges. Two or three large *mandres* stood amongst the long, straight rows of carob trees on its eastern end where it rose above 300 m a.s.l.

Grazing goats had stripped all but a few sparse patches of grass from the red, dusty, rock-strewn ground, and trimmed the lower branches of the smaller carob trees to a uniform height above ground level. The Peyia Forest boundary ran along the 300 m contour and was marked by a low wall close to which, outside the forest, two rectangular (1.5 x 2.5 m) holes had been cut into the bedrock (SE0040). They were approximately 0.5 m deep, their long axes ran close to east/west and their function was unclear. Although the *mandres* were modern the remains of walls indicated some formal use of the area in the past; these were probably field boundaries or large enclosures, rather than structures. The activity on Lipati might have been associated with Toxeftra *Chiftlik*, which Kitchener (1882) marked on its southern edge. The point is now well within the forest boundary, and far beyond GS016; Goodwin (1984) records that there is no longer any sign of the *chiftlik* on the ground.

Well outside the square, some 500 m to the southwest and close to the edge of the gorge, was another area of activity – a threshing floor (SE0048) and another structure (SE0049) were recorded. There was no sign of paving on the floor, but there was a rough retaining wall around it where the slope began to fall away more steeply toward the gorge. Several domestic olives grew nearby and one that was approximately 100 years old grew on the edge of the threshing floor. SE0049 stood 130 m to the east and was built right on the edge of the gorge. It was 9 x 3 m and built of rough blocks with large chinking and some mud bonding; a door in the north wall faced away from the gorge. There was some pottery in and around the structure, mostly with hard glaze, dating from the 19th century. Several small olives (30-40 years old) grew nearby, and one older specimen that was about 300 years old. Another structure stood in a similar position, 300 m

further to the southeast; it was not recorded. It seems probable that the structures, built on marginal land at the edge of the gorge, were occupied, perhaps seasonally, by those working in the fields and processing the harvest at the threshing floor.

In the southeast of the square at Pano Arodhes *Asproi* a rectangular enclosure (SE0090) had been built into the angle between two abandoned field walls. Built from rough blocks without bonding, it measured 3 x 7 m but was extremely ruined and almost obscured by the tumble that lay inside and out. Amongst the tumble below a nearby terrace wall, I found a handle fragment from a self-slipped transport amphora.



Figure 6.26 View across GS016 from northeast, toward Lipati – Avgas gorge is on the right of picture, see also Figure 6.22 and Figure 6.36.

To the north of the road the ground sloped away from a limestone outcrop, gently down toward the Avgas, which passed about 250 m to the north of the square. This area was again rough pasture, but there were more trees – well-established olive and carobs – as well as check dams, broken down field boundaries and several structures; a second road cut diagonally across this section of the square from southwest to northeast.

In the northwest of the square, some of the terrace walls made with large lumps of rock appeared to have incorporated immovable natural detritus. Just below one of them a stone-lined well had been sunk and retaining walls had been built to either side of a dry, overgrown watercourse, which suggested that water as well as land management had been important here in the past.

On the outcrop between the two roads were several structures and enclosures. At Pano Arodhes *Stavli* two ruined enclosures (SE0091) stood against a terrace wall, amongst mature carob trees, on the moderate slope at the foot of the outcrop. The first was tumbled but distinct and measured 16 x 6 m. The second, a little way to the south, measured 2 x 6 m and was far less clear; it was built from rougher blocks, some of them unworked boulders. Two hundred and fifty metres to the east at Pano Arodhes *Asproi* were two ruined structures (SE0081, SE0082). SE0082 – a 4 x 5 m structure built from rough blocks with mud bonding – stood close to a flat area of the right size and shape to be a threshing floor; the gorges on either side of Lipati, down which there was clear view, would ensure a steady breeze from the sea. 100 yards to the north SE0081 (5 x 2 m) was of rough, dry-stone construction and incorporated a large, natural outcrop to one side of the entrance in its long, west wall. It stood on a slightly raised piece of ground,

against but not bonded with a field wall, close to its intersection with two others. Kitchener's (1882) map shows a large enclosure stretching about 400 m northwest from Pano Arodhes *Eso Pikhys* (*Essopisi* on the cadastral). It overlaps the area of walls and enclosures around SE0025, but neither it, nor the structure in its southeastern corner were identified on the ground.

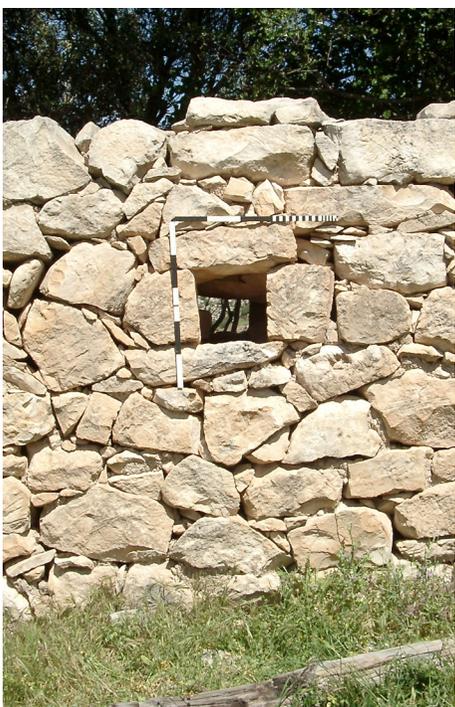


Figure 6.27 Detail of back wall of SE0025.

In the north of the square at Pano Arodhes *Koukkoupheri* stood a rectangular structure and oven (SE0025). The structure (9 x 5 m) was built from a double skin of rough stones with stone chinking and mud bonding; most of the larger blocks had been worked to produce a flat face. The walls stood up to 1.5 m high and were banked up on the outside with field clearance; an entrance in one of the long walls faced southeast, and there was a small hole opposite it in the back wall 1 m up from the ground. The only sign of a roof was some large, charred timbers inside the structure, and the only sign of pottery was a single fragment of a thick-based Ottoman to modern jug. The oven,

standing at the southwest end of the structure, had collapsed, and stood about 1 m high.

The structure stood on a broad, enclosed terrace, about halfway from the ridge to the valley bottom. The terrace was covered in thick grass and was planted with olive and carob trees that were still cultivated. Close to the structure two impressive olives, which stood over 8 m tall, were about 300 years old.

A shallow gully crossed the northeast corner of the square (toward GS017); there was no water flowing in it, but the plant cover was lush and included oleander bushes and a stand of the giant reeds (*Arundo donax*) used in traditional roofs. The bedrock here was igneous, rather than limestone as it had been across most of the square, and blocks of basalt were scattered across a flat area just north of the gully, which was in the ideal position – in direct line with the Avgas gorge – to have been a threshing floor.

The cadastral plan shows three springs and three mills to the north of the square at Kato Arodhes *Koloni*. Two of the mills were identified (SE0028, SE0052), the



Figure 6.28 300 year old olive (SE0025).

third had probably stood on a site now occupied by a modern *mandra*. One of the springs fed a concrete cistern and a series of troughs for the goats; the other two were less obvious, but at least one contributed to a very muddy slope below the *mandra*.

One of the mills (SE0028, Figure 6.29, Figure 6.30) stood to two stories and was visible from the far side of the valley; it stood on a moderate south-facing slope just above the Avgas. SE0028 was built from dressed, but irregular, limestone blocks with limestone chinking and mud bonding; a large oven stood at the east end of the building. The two-storey section of the mill probably constituted storage and possibly living quarters; the surviving floor was made from roofing reeds on close-spaced wooden joists. The mill was built into the slope so that the penstock was only about 2 m tall and most of the water's drop would have happened inside the building. There were several fragments of millstone amongst the tumbled walls of the main building and a little indistinguishable pottery.

There were several buildings on the slopes above SE0028 and the modern *mandra*. SE0050 was a rectangular structure with two rooms, each approximately 5 x 5 m; the roof of one had collapsed and the other was collapsing. On one end was a small, rectangular enclosure and on the other a smaller curved enclosure, neither of which showed any signs of ever being roofed. There were low terraces behind the structure, but the slope became steep two or three metres in front of it. SE0051 was on the same level as SE0050, but some 150 m to the northwest at Pano Arodhes *Kaphkalla tis Kolonis*. It sat above the dry gully of the Argaki ton Garaoudhion, which ran down to join the Avgas. The structure was square (5 x 5 m) and well built from rough limestone blocks; two of the double walls included

chinking and mud bonding. It had no roof and whilst it had a south-facing door there were no windows in the surviving walls. An amorphous enclosure measuring approximately 7 x 6 m had been built on its eastern end, and what appeared to be a square oven stood in front of them both.



Figure 6.29 Mill (SE0028) at Koloni from northwest.

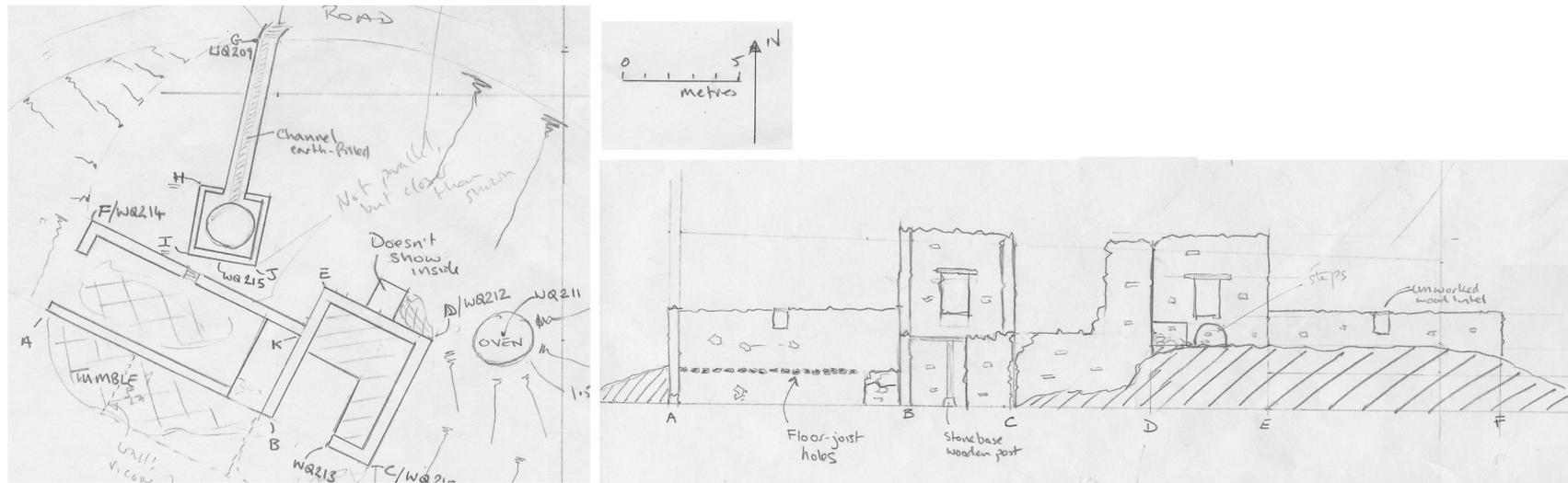


Figure 6.30 Sketch plan of mill at Koloni (SE0028).

Domestic trees – including olive, carob, almond and walnut – grew below the mill and on the slopes and terraces above it, around the other structures. Cypress trees, terebinth and a palm also grew nearby.

The second surviving mill (SE0052) had far fewer auxiliary buildings than SE0028, comprising solely of the leat, penstock and a structure that contained the stone and the wheel. The remains of an iron-bound millstone lay amongst the ruins of this building. All the structures were built from rough-dressed limestone blocks; the leat was particularly impressive, running out from the hillside to the

top of the penstock, which stood about 5 m high. Some 20 m upslope from the start of the leat was another ruined structure (4 x 5 m); it had double walls built with rough stone and some mud bonding. The collapsed mud roof had been supported on unworked timbers.

There was no obvious water supply for the mills; all three springs were down hill of them. SE0028's leat ran into the road and disappeared, and SE0052's stopped at the slope. The cadastral plan, however, shows Argakin tou Mylou (mill stream) leaving the Avgas and running behind all three mills before rejoining the main

river; presumably its course had been deliberately altered to supply water to the three leats, although there was no clear sign of it on the ground.



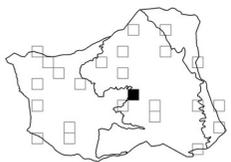
Figure 6.31 Leat running out to penstock (left of centre) and structure (bottom left) of mill (SE0052) at Koloni.

There was very little pottery at either of the mills or any of the nearby structures, and none of it was identifiable. The exception was on and at the top of a steep, unstable slope to the north of SE0028 where there was a plentiful assortment of

rough and fine, storage and table wares dating from the Late Hellenistic or Early Roman period. There were also a few small Hellenistic to Roman sherds on the slope directly across the river from SE0052.

The preservation of the mills would suggest that they were in use in the 19th and possibly the 20th century, so the structures were probably built during the Ottoman period, and therefore contemporary with Toxeftra *chiftlik*. The locality name just south of the river is *Frangika*, meaning ‘Frankish things’ and presumably referred to the surrounding land and resources. This corroborates the identification of Kato Arodhes *Koloni* with the vanished medieval village of Coloni (Grivaud 1998: 247; p.com.), further supported by the presence of Ayios Yeorgios church some 600m to the north (Kitchener 1882). A second church, Ayios Savas, was marked 1600 m northeast of Koloni, but neither building was identified on the ground. Ayios Yeorgios may have survived as unmarked ruins on some of the more recent maps, and as the locality name Ayios Galatis; Ayios Savas certainly persists as a locality on the cadastral plan. The Hellenistic to Roman pottery confirms further that the area was frequented in earlier periods, and the distinct detour made by the ancient road from Cape Drepanum to Pano Arodhes (Bekker-Nielsen 2004: 133, map 13) suggests that there was probably a settlement here that attracted considerable traffic. Perhaps the perennial stream ensured a continuing tradition of milling on the site until the early 20th century.

GS017



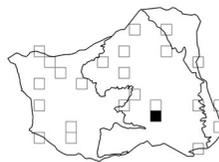
Peyia TZ2
443000 / 3865000
7/v/03

GS017 was directly to the northeast of GS016. The road that ran across GS016, continued across the western half of GS017. Several smaller tracks led off to either side, but were seldom identifiable beyond about 100 m. The underlying bedrock was predominantly basalt and the vegetation much coarser than in GS016, tending to spiny burnet and gorse, with less grass.

Several watercourses crossed the square, from east to west, heading toward the Avgas; rushes, grass and some impressive algal blooms choked what little water there was in them. Just north of the middle of the square was a pond. The patch of rushes surrounding it was at least 20 m across, but the water was rather more limited. A spring, marked on the cadastral plan, had created a damp, lush area below the mouth of a steep-sided gully, in the northeast of the square.

In stark contrast to GS016, there were few signs of human activity in the square; some long straggling terraces ran across the igneous slopes in the south, and there were some walls around a cluster of almond trees in the northwest of the square. One very neglected terrace in the middle of the square on its southern edge marked the extent of the flatter ground that might have been cultivated in the past. Now, the transition was clear in a change of vegetation, from spiny burnet below it, to gorse with a thicker undergrowth of spiny burnet on the slope above.

GS018



Peyia TZ2
444000 / 3864000
7/v/03

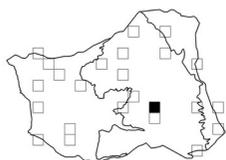
The gorge of the Argaki ton Kouphon cut across the southern quarter of this square. Above the gorge the ground was a mixture of vineyards and rough ground. Toward the edge of the gorge, in the west of the square, 3-4 m deep terraces had been cut into the rock; they were covered in rough grass, shrubs, and occasional cypress and almond trees. Some 5 m in from the lip of the gorge a vertical shaft about 1 x 1 m had been cut into the rock. The shaft went down several metres, but the interior was too dark and the edge of the cliff too close to be too inquisitive. It looked anthropogenic, but had no obvious use.

Most of the vineyards had red/brown soil and had recently been rotavated. As a result pottery visibility was very poor and the situation exacerbated by shadows cast by the low morning sun. Nevertheless, a small number of coarse, non-descript sherds did crop up in the northeast quadrant of the square.

In the west of the square it was possible to scramble down the cliff onto a sort of mezzanine level, where there were several stretches of rough terracing across the rough, rock-strewn ground. To the east, along a narrow path between the foot of the cliff and a sheer drop, the ground opened out again at Pano Arodhes *Kouphaes*. The slope here was steeper, and there was even more tumbled rock on the ground, but amongst the confusion was an enclosure formed from a rough, L-

shaped assembly of stones and natural faults. Presumably, despite the inauspicious location, it was an abandoned goat or sheep pen.

GS019



Peyia TZ2
443000 / 3864500
8-9/v/03

SE0026 Church
SE0038 *Spitaki*

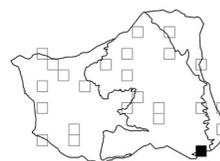
All but about 30% of this square was covered in vineyards; the remainder was planted with cereal crops and a few rough, untended plots. In the south of the square, toward the west, a large clearance cairn and rubbish heap had grown up over a rectangular, dry-stone base, which was possibly a disused grape-loading platform. The vanished medieval settlement of Ayios Yeorgios (Grivaud 1998; Kitchener 1882) or Thermoklini (Goodwin 1984) was in or near to this square.

Just outside the square to the west, beside the road through the vineyards at Pano Arodhes *Kambos tis Feizous*, was the site of Ayios Yeorgios Church (SE0026). All that remained was a low, modern, dry-stone wall, its top sealed with concrete, that enclosed an area between 10 and 20 m wide, and 30 m long. The maps describe the church as ruined, but there was nothing inside the enclosure but fennel and rough grass. Pottery was found all across the square; it was possibly thicker on the ground in the southeast, but due as much, perhaps, to ground conditions as to the presence of the church or attendant village. Nevertheless

there were definite medieval sherds in the mix as well as Ottoman, although the majority of sherds were 19th century or later.

A derelict *spitaki* (SE0038) stood some 500 m outside the square to the east at Pano Arodhes *Maile*; the area was covered in vineyards and this structure stood on the edge of one of them amongst thistles, terebinth and neglected vines. It measured 3 x 2 x 1.75 m; the walls of dry-stone, with some chinking, incorporated some very large rectangular blocks – up to 0.7 m long. There was a small window opposite the doorway, which was still spanned by an unworked lintel, and a single roof timber, also unworked, remained in place. There was a little thin, coarse pottery around it, but nothing that retained its original surface.

GS020



Peyia TZ2
446000 / 3862500
9-10/v/03

SE0027 Church

A cliff cut across the southern half of this square. At its foot the steep-sided gorge ran down to the upper reaches of the Xeros, which ran southwest to Coral Bay. Parallel to, and about 100 m north of the cliff, ran the main road from Kathikas to Peyia. In the west of the square, where the road and the cliff ran closest together, was a gully full of modern detritus.

North of the cliff the ground was almost entirely covered in vineyards, except in the northwest corner, where the ground was rougher, and another, much smaller cliff marked the beginnings of the Aspros gorge. In this area some stretches of low, rough, dry-stone field boundaries and retaining walls had been superseded by large, modern terracing and check dams that were planted with olive trees, but the majority of the square was flat. The rough patches between the vineyards were covered with impenetrable fennel and thistles.

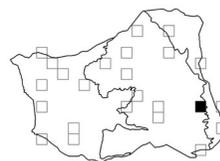
Where visibility in the vineyards was good there was a steady background of sherds; there was a considerable amount of Late Roman to Byzantine – combed, ribbed and cooking ware – and some medieval to modern grooved fine ware.

Below the cliff, the southern third of the square fell across sheer, rocky batha, and was impossible to survey. Just to the south of the square some very rough terracing, a few domestic olives and a derelict water cistern stood near to a spring, which ran out of the cliff face through a rusting pipe set in concrete. The cistern, some distance down the watercourse from the spring, was fine built from dressed limestone blocks and mortar, with buttressed corners and a plaster lining.

Two hundred and seventy metres to the south of the square at Kathikas *Koronia* was the church of Ayios Nikolaos (SE0027); it stood toward the end of a spur running south from the cliff into the Xeros gorge, and was visible from the top of the cliff. There were two buildings on the site; a ruined stone-built structure (3 x 2 m) and a working building made from pressed metal sheeting (4 x 2 m), which was full of the paraphernalia of devotion. The spur was covered in coarse grass, fennel, spiny burnet, gorse and wild olive, beneath which the stone structure had

all but disappeared. The church's position suggests that it was to be seen or deliberately visited, rather than passed by and visited opportunistically, and despite difficult access down a very steep, rough track, it was still attended and candles lit. It does not appear on Kitchener (1882), the cadastral or the most recent topographical maps, which suggests that it was ruined enough to be ignored or unknown by the end of the Ottoman period and, probably not restored until toward the end of the 20th century.

GS021



Peyia TZ2

446000 / 3864500

10/v/03

SE0035 Field System

SE0036 Field System

SE0037 Field System

GS021 could be seen, almost in its entirety, at one glance. The upper reaches of one of the main tributaries to the Argaki ton Kouphon ran across it from east to west and a track ran along the top of the ridges to either side of it. The north and south edges of the square lay just beyond each of these ridges, so the square offered a neat cross section of a single stretch of gully. The river was dry except for a few standing puddles toward the west of the square. The slopes were covered in long, rough grass, which had definitely not been grazed by sheep or goats. Flowers grew abundantly amongst the grass; asphodel almost exclusively

on the south facing slopes, whilst several kinds of orchid favoured north-facing ground.

The underlying bedrock was igneous, and loose, reddish basalt made progress difficult as well as causing considerable background confusion amongst the thick grass. I found no pottery in this square. There was, nevertheless, considerable evidence of human activity. Just west of the middle of the square, there was a

short length of rough retaining wall on the north bank of the river, and tracks – some far from distinct – led down the slopes to cross the river.

Most notable, however, were the systems of terrace walls and field boundaries that covered the area; two that fell within the square were photographed (SE0035, SE0037), as was one on the north facing slope of the gully to the south of GS021 (SE0036, Figure 6.32). The slopes were covered in small fields and enclosures, and at least two generations could be discerned from the extent to which the walls had slumped, collapsed or been overgrown, the older of which could

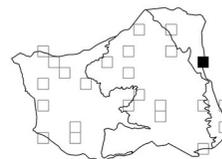


Figure 6.32 Field system (SE0036) on north facing slope to south of GS021.

reasonably be expected to date back to at least the Ottoman period. Large fields of oats straddled the roads along the ridge-tops and the sides of the gully in the east, closer to the villages, where the slope was less severe. The old field systems have fallen out of use as only the more accessible fields are still cultivated by the larger, modern, mechanised farm equipment that is less able to deal with the extreme conditions and restrictions of small, terraced fields.

6.1.3 Topographical Zone Three – TZ3

GS015



Peyia TZ3
446000 / 3866500
3-4/v/03

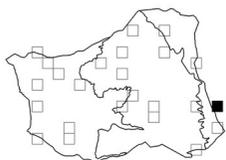
The road north to Polis ran through this square, and much of the land to either side was cultivated; mostly planted with vines, cereals and vegetable crops in plots clearly marked with dry-stone walls and terracing. Between the cultivated plots rough, untended areas suffered from various levels of neglect and overgrowth from weeds, fennel and terebinth. Some of the rough plots still showed vestiges of cultivation and nowhere were there signs of goat activity. As in GS021 the fields here were flatter and closer to the villages; the goats, sheep and their keepers tended to occupy the more remote areas, the edges of the villages, and rougher parts of the territory. Nevertheless *mandres* were not unknown amongst the agricultural fields (Ionas 1988: 10), and the animals were often grazed on harvested fields to manure the ground.

West of the road in the north of the square, the ground had been badly disturbed when the road was widened; it was in this area that Baird (1984) located a Classical cemetery. There was one small, blocked hole in a cut to the west that might have been a tomb entrance, but the deep terracing and thick overgrowth had either destroyed or concealed any clear evidence of past activity on that side of the road. Despite this there was a small amount of early pottery on the

terraces: pre-medieval amphora and some small fragments of Hellenistic to Roman cookware.

In the east of the square there was a mixture of Roman and Ottoman pottery. The different levels of cultivation in the square meant that pottery levels varied accordingly, from absolutely nothing on newly bulldozed cuts, through occasional sherds, to fairly abundant in some of the vineyards. The overall impression was that the northeast quadrant was sterile, whilst the rest of the square threw up a low background of coarse sherds, and occasionally an identifiable fragment.

GS031



Peyia TZ3
447000 / 3864500
4-5/xi/03

SE0042 Field Shelter

This square was 1 km north west of Kathikas and the road to Polis clipped the southwest corner. Most of the square was covered in vineyards, and had been since the 19th century (Kitchener 1882). Where vineyards had been abandoned they were overgrown with gorse, spiny burnet and fennel, and there were several dilapidated, modern animals pens and *spitakia* amongst them. Some patches of fennel in the northwest were impenetrable and tall enough to hide anything under 2 m tall.

In the east of the square, at Pano Arodhes *Xerolimni*, the ground sloped away; it was cut with narrow terraces retained by dry-stone walls built with large blocks and standing about 1.5 m high. Just below the break in slope above the terraces was an abandoned *spitaki*, measuring 2.5 x 2.5 x 1.5 m. It had a corrugated iron roof, dry-stone walls of unworked limestone blocks, and was full of loose rubble that was probably field clearance. It stood on a low spur and the ground sloped away gently through the vines on all sides but the south.

There was a thin scattering of pottery all over the square, amongst the vines, and also in a long stretch of field clearance in the north of the square. Much of it was Ottoman to modern, but in the middle of the square to the north there were several fragments of Late Roman amphora and tile.

GS032



Peyia TZ3
447000 / 3863500
5-6/ix/03

SE0043 *Mandra*
SE0044 *Spitaki*

The village of Kathikas, flanked by two main roads, occupied much of the eastern half of this square. The visitor's centre occupied the old school and sat at the western end of the village square. At the far end stood the *cafeneion*, whilst on the north side of the square stood the church of Panayia, with the memorial to the heroes of the war of independence opposite it on the south side. The village

plan shows a lime kiln next to the school building and an olive mill on the south side of the square.

Many of the traditional houses in the village have been restored to let to tourists, whilst on the outskirts modern blocks have been built on more marginal land hitherto used for other purposes. In the north of the square new construction was taking place amongst vineyards that had already been planted over areas where the cadastral plan marks threshing floors. A similar apartment block in the south of the square announces the land's former use in its name, Kathikas Aloni (Kathikas threshing floor). The cadastral plan shows an arc of threshing floors around the western margin of the village, and presumably such raised, flat sites, with a fresh breeze from the sea, make ideal building plots now that the processing of grain has been mechanised.

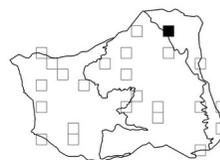
West of the village was a mixture of viticulture, horticulture and orchards amongst which were a derelict *mandra* (SE0043) and ruined *spitakia* (SE0044). The *mandra* stood just east of the road and had clear views down to the gorges that cut through the west of the survey area, and of the sea beyond; this site may also have been earmarked for development. The enclosure was over 30 m wide and a three or four room structure with attached smaller pen stretched along most of its eastern side. Parts of the structure had a corrugated iron roof and both it and the enclosure were of rough, dry-stone construction. The whole complex stood on a limestone bank above the road and was overgrown with figs, capers, globe artichokes, fat hen and rough grass.

There were two structures at SE0044 standing 4.5 m apart; one measured 5 x 4 m, the other 4 x 4 m. Both were built into the boundary wall of a vineyard and had rough, dry-stone walls. The more southerly of the two was better preserved; about 50% of its walls survived to their original height and the vestiges of a traditional mud roof ran along them. The door lintel was a piece of reused timber. There was a good deal of modern refuse in and around both structures, but even this phase as a rubbish tip seemed to have ended as everything was overgrown with brambles, capers and *mosphilo*.

Immediately to the west of the road between Kathikas and Polis there were the vestiges of a field system; most of the terraces and boundary walls were overgrown with wild oats and cow parsley, although some patches of horticulture and viticulture remained. Beyond them, where the land was still considered viable for modern machinery, were fields of wheat and barley.

There was very little pottery in the square, but what there was came from the vineyards in the north. Amongst the rough modern sherds were a few yellow/brown glazed pieces from the 19th century.

GS033



Peyia TZ3
444500 / 3868000
9-10/ix/03

SE0045 House
SE0083 Structure

This square fell across the village of Inea. A narrow strip in the east of the square skirted the built up area and passed through vineyards. To the north the ground was again given over to vines, whilst starting down the valley in the west was a mix of rough ground, almonds and horticulture.

There were three churches in the village; two that are marked as ruined on the village plan have been rebuilt. Ayia Marina, a small church, was beside the road very close to the village boundary with Dhrousha. Archangel Michael, also small, was built on a crossroads in the centre of the village opposite the supermarket and the cafeion, which had an olive mill in its yard. Evangelistra was large, and 1883 was inscribed above the door, although this was a renovation, rather than the founding date. Beside Evangelistra was a basket-weaving museum, in the old boys' school building; the current school was 100 m further up the same road.

In the strip down the east of the square were several structures and enclosures built with dry-stone walls, mud brick and flat, mud roofs. Most were no longer in use, although one or two were still used for storage, and in some cases the whole plot had been abandoned. The abandoned plots and new buildings had led to subtle shifts in the overall morphology of the settlement. For example, older buildings often stood between the occupied houses and the vineyards so that the newer houses seem to have been built closer together, making the main area of habitation more compact and freeing up wider spaces for cultivation.

Most, if not all, of the threshing floors that once curved around the eastern and northern, uphill side of the village had long since been covered by vineyards; I found a *doukhani* blade in one to the north of the village. A little removed from

the village, 150 m northwest of Ayia Marina church, a large, ruined structure (SE0083) stood amongst the vineyards, close to one of the former threshing floors. There was one large building built with rough worked stone, stone chinking and mud bonding. It had two rooms (8 x 5 m and 5 x 4 m), the larger of which had the remains of plaster inside. The smaller room had a concrete lintel across the door. Where the walls stood to their full height they were 2.5 m tall. Opposite the main structure was a smaller, dilapidated, but nonetheless locked building measuring 5 x 4 m and standing only 1.5 m high. Low, dry-stone walls ran between the ends of the two buildings forming an enclosure into which they both opened. The enclosure and perhaps the smaller building suggest that livestock might have been kept at the site, and its location would seem to associate it with agriculture, but the size, particularly the height, of the main building seem excessive for both of these.

To the southwest of the village, above sloping and broad-terraced farmland, stood another large structure (SE0045, Figure 6.33). A passing priest told me that it was a family house; dogs and donkeys would have lived in the two narrow areas, whilst humans occupied the room that stretched the full width of the building (5 m). Both sections were 6 m long. This was a typical *dichoro* (Ionas 1988: 46-48, 199-201) and the structure consisted of two of them – semi-detached.

The *dichoro* to the southeast incorporated concrete lintels, whilst the one to the northwest had a roof timber made from a tree trunk. The walls were made from rough limestone blocks – some of the better worked corner pieces had chisel marks on them – with stone chinking and mud bonding. There were several

alcoves inside the full-width section, at least one of which had a shelf made from a piece of old *doukhani*, and stone-built *kouzostates* to store water jugs.



Figure 6.33 Composite photograph of the older *dichoro* (SE0045) at Inea *Khoglakera*, from northeast. The concrete lintel of the second unit is just visible above the wall in the left of the picture. Scale is 1m.

The concrete in the second unit indicates that it was of later construction, possibly a dowry house built onto the family home. One of its ‘animal sections’ had been subdivided after the main building phase; a butt-joined wall created an area that was the right size and shape for an inside toilet, although it could equally have been a cupboard or store. Oddly this newer unit was more dilapidated than the older one and was overgrown with caper, terebinth and fig. This could be one outcome of increasing wealth and expectations in the 20th

The Peyia Survey Area

century; it is possible that the dowry house was built with modern materials for a daughter who felt the need for modern facilities in her home. When the married couple moved away from the family home in pursuit of more modern accommodation, the older generation remained in their original unit and the dowry house began to decay. Most of the walls in the unit with the wooden joist stood to roof height. In the western corner was a section of collapsed roof that had about half a metre of space below it. The floor of the building must have been dug down here, which would have made the interior height of the building close to 3 m; unless this was a low cellar or storage space below a collapsing section of floor.

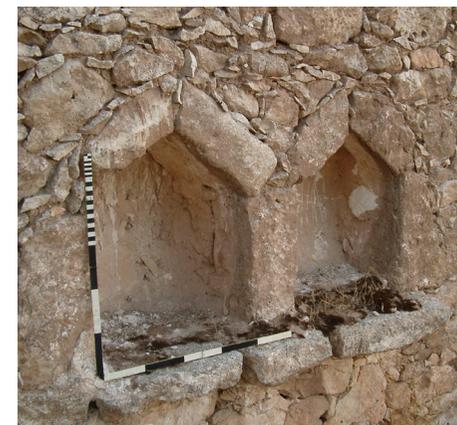


Figure 6.34 Kouzostates (SE0045)

6.2 Occupation, Exploitation and Communication

Today most of the Peyia survey area is easily accessible. It is edged on three sides by roads; hard-packed and unsurfaced along the coast, concrete across the north and the main thoroughfare to Polis through the area's eastern edge. The interior of the area is well served by a network of small tracks and roads, some of which are regularly used and maintained. The land itself ranges from the built-up, occupied strip around the villages in the east, through agricultural fields to rough pasture, maquis and forest on the ground sloping down to the coast in the west. Whilst the land is no longer exploited as intensively as it was in the past, it is far from abandoned or ignored.

This continued occupation and exploitation of the landscape that preserves access routes into and across the area also means that there is little structural evidence that dates back beyond the late Ottoman or early British period. Pottery evidence from all periods was present in all three topographical zones, although it was more readily visible in ploughed fields and between vines than on rough pasture or beneath pine trees. Surprisingly, pottery was present in even the thickest maquis, probably surviving because it remained largely undisturbed. And it was visible because there was little ground cover beneath the juniper bushes and no thick carpet of pine needles to reduce or eliminate visibility as there was in the forested areas.

Roman Period

The evidence for Roman settlement in the Peyia survey area was sparse. No structures dating to the Roman period were identified, but several caves, since used as goat pens, might originally have been tombs. Small amounts of pottery

were found in vineyards on the ridge in the east, and in the maquis near the coast. The low level of pottery found in TZ2 (300-600 m) might have been due to the reduced ground visibility amongst rough pasture and cereal crops, but in the Khrysokhou drainage the majority of Roman sites was recorded below 300 m a.s.l. (Adovasio *et al.* 1975; 1978), so it is possible that TZ2 was just used less during this period.

There were no clear concentrations of Roman pottery that suggested settlement sites in the Peyia survey area, but fragments were found in two areas of agricultural land (GS002, GS016) that were also occupied during the Ottoman to modern period, possibly indicating the long-term use of a favoured site. GS016 and the surrounding area comprised agricultural land, a permanently flowing river, several streams and springs, and good communication routes to both the east and the west. The evidence tentatively suggests that the area could have been occupied since at least the 2nd century B.C. The evidence for Roman settlement in GS002 was even less certain, but a little pottery was found near the later structures of SE0006. Roman amphora handles were found near two of the caves in the area, some of which had been carved out with arched roofs; the investment of energy required to create burials of this kind suggests a more substantial degree of settlement than a single farmstead.

It is unlikely that any settlement in the Peyia survey area was as large as Ayios Kononas some 10 km to the north (Fejfer and Mathiesen 1995) or that at Cape Drepanum to the south, which appears to have been the focus of Roman settlement in the area (Christou 1992; 1993; Hadjisavvas 1977: 227;

Karageorghis 1971). Ayios Kononas sat close to intensively cultivated land (Fejfer and Mathiesen 1995: 77). Ayios Yeorgios at Cape Drepanum, on the other hand, had no such convenient resource, but agricultural workers could easily have reached fields in the interior of the Peyia survey area from the coast road that was in use during the period (Bekker-Nielsen 1995: 116; 2004: 135). A dependence on the road system might account for the low level of settlement in the interior of the Peyia survey area; north/south travel will always have been hampered by the deep gorges that cross it.

Whilst the coast road might have given access to the lower fields, the upper road ran through cultivable land along the ridge. Given the proximity of Cape Drepanum and Polis there need not have been another large town on top of the ridge, but it seems unlikely, given the potential for cultivation, that it would have been entirely devoid of settlement. The combination of transport, storage and cooking vessels found with pieces of tile in GS031 offers evidence of a possible settlement area. Roman cooking and tablewares were also found in GS015 and GS020 some 2 km to the north and south respectively; all three squares lie on or close to the course of roads used during this period (Bekker-Nielsen 2004: 122, map 13).

The settlements at Cape Drepanum and Ayios Kononas fit into the generally agreed pattern of Cypriot settlement patterns and land use during the Roman period; larger settlements, often on or near the coast, stood at the economic and social, if not the physical, centre of networks of small farmsteads and estates. The road system and pottery evidence further suggest that the Peyia survey area was well exploited throughout the Roman period and supported a considerable

population. It is impossible to state, with certainty, the nature of the occupation, but it seems likely that the arable land of the Peyia area was dotted with farmsteads that were focused on Ayios Yeorgios at Cape Drepanum.

Medieval Period

None of the structural evidence recorded in the Peyia area could be definitely identified as medieval in origin, but the pottery evidence suggests that the buildings (SE0046, SE0047) on the slopes of Lipati dated to this period. Medieval to modern pottery appeared in all topographical zones, but was never very plentiful, despite the amount of activity in the area suggested by the Venetian village lists (Grivaud 1998). Interestingly I did not find any pottery identified as medieval in those squares closest to the modern villages, which were founded in that period.

The Venetian lists included a settlement called Lara that may have been abandoned after an Ottoman raid in 1570 despite the fact that the Turks were driven off on that occasion (Grivaud 1998: 250; Hill 1952: 894). Its exact location is unknown, but the assumption is that the settlement was on or near the Lara promontory just northwest of the Peyia survey area. No settlement is marked on early maps (Stylianou and Stylianou 1980), no evidence of medieval settlement was found there by Megaw in 1954 (Fortin 1978) and the single sherd of 13th century pottery retrieved from the bay came from a wreck (Giagrande 1987; Morris and Peatfield 1987). As an alternative location, Lara Peak, some 7 km inland, is tempting. It is closer to most of the other settlements of the period and a Venetian watchtower might have been built on its summit (Goodwin 1984;

Jeffery 1983: 411), but it seems an unlikely target for a small, coastal raiding party.

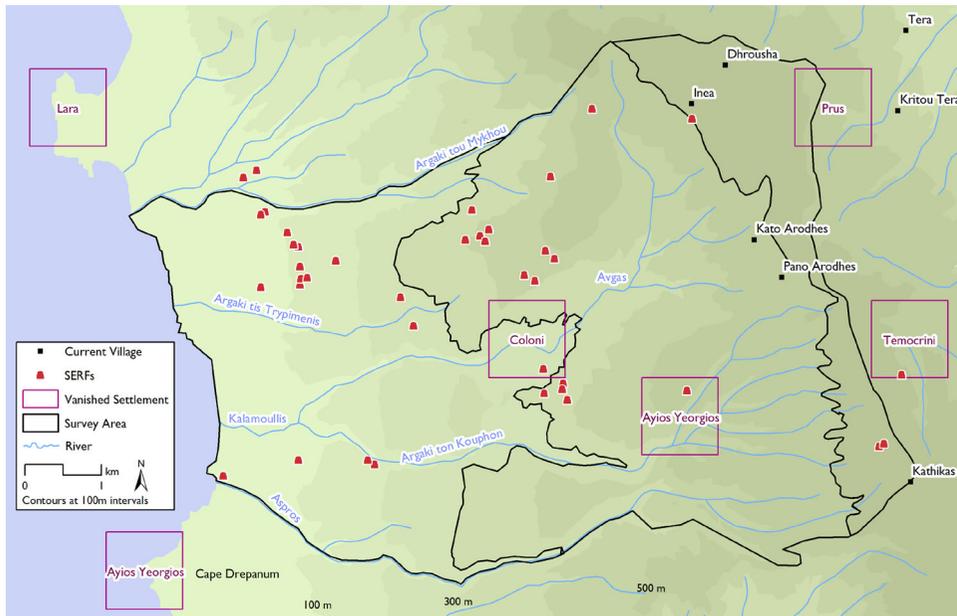


Figure 6.35 Settlement – current and vanished. Data for vanished settlements is taken from Grivaud (1998), which gives location to the nearest kilometre.

The villages on the ridge are considered to be Frankish in origin; both Inea and Arodhes are known to have been estates owned by military orders (Goodwin 1984; Grivaud 1998: 348). In addition, both villages have names that come from a French root, although Inea could also be traced back to an old Greek Cypriot

dialect word (Goodwin 1984). The prehistoric and classical evidence that has been found along the ridge also indicate that it was occupied long before the medieval villages were established (Baird 1984).

In addition to the surviving villages on the ridge, three vanished settlements are included on the lists: Temocrini, Ayios Yeorgios and Prus (Figure 6.35). Temocrini appears to have been in existence under the Franks; it was first mentioned in 1365 (Baird 1984; Grivaud 1998), but the other two settlements did not appear until the 16th century lists. The little Frankish sgraffito that was identified at Ayios Yeorgios, however, suggests some use, if not occupation, of the area during the 14th or 15th century. Temocrini and Ayios Yeorgios disappeared from the lists around the middle of the 16th century, shortly before the Ottoman invasion (Grivaud 1998: 248, 251); it has been suggested that the Greek occupants of Ayios Yeorgios moved to the current Kato Arodhes (Theodosiou and Pitta 1996: 24). The third vanished settlement, Prus, could attest to some continuity of settlement from the medieval into the Ottoman period if, by a change in scale and status, it became *Prou Chiftlik* (Goodwin 1984; Kitchener 1882), approximately 1 km northeast of Dhrousha.

The concentration of population centres along the ridge is in keeping with Grivaud's (1998: 348) assertion that settlements at the time were situated close to productive and accessible land; in this area that would have consisted of vineyards at the top of the ridge, with agricultural land, rough pasture and forest down the slope toward the coast. It seems likely that the medieval inhabitants continued to exploit much the same land as their predecessors, but approached it from above, rather than below, presumably building seasonal settlements to

facilitate exploitation of land at some remove from the villages. It would appear, from this pattern, that the factors that caused the population to shift away from the coast to the preferred medieval location of the high ground had considerably less effect on the exploitation of the land.

Ottoman Period

In contrast to the Roman and medieval periods, structural evidence from the Ottoman is widespread; the Peyia survey area, particularly below the 400 m contour, is dotted with abandoned structures: houses, *spitakia*, enclosures, *mandres*, pens and mills. Sherds of glazed Ottoman vessels were found all across the area on ploughed soil as well as close to structures; none however could be safely tied to any particular building or establishment.

It is clear, despite the loss of at least three villages, the area remained occupied and exploited throughout the Ottoman period. Several of the structures had remained in use until quite recently; plastic sheeting, oil drums and chain-link fencing incorporated into them attested to this, and one or two still had sound, padlocked doors. Nevertheless, it seems likely that most, if not all, of them were built before the arrival of the British toward the end of the 19th century, and it may be that they were perpetuating, and obscuring, a pattern established during the medieval period.

Writing in *Devia Cypria*, 1889, Hogarth noted that the landscape north of Cape Drepanum was devoid of human habitation except for occasional shepherds' refuges (Fejfer and Mathiesen 1995: 73). The coast road was not in evidence at this time, so Hogarth would have been travelling through the landscape, rather

than skirting along its western edge (Fejfer and Mathiesen 1995: 78), and it seems reasonable to assume that by following established tracks, poor though they might have been, he would have come across a reasonable representation of the occupation of the region. That he did not suggests that there was little there. Alternatively, seasonal structures might have been temporarily unoccupied, although if they had been abandoned it would suggest that the exploitation of the area had ceased by the end of the Ottoman period. A combination of these two possibilities seems more likely than the final alternative that none of the structures I recorded were built until very late in the 19th century.

There was an overall decrease in population on the island during the Ottoman period, but also some redistribution; Dhrousha appears to have grown considerably between 1565 and 1825, but all the other villages recorded on the Venetian list appear to have reduced in population over the same period; three had disappeared completely (Grivaud 1998; Papadopoulos 1965). Dhrousha's apparent growth may simply reflect the different make up of the populations of the different villages; in 1825 all taxpayers were counted, whereas in 1565 only the *francomati* were.

On the other hand if the village of Prus, which had disappeared from the lists by 1825, had transformed into Prou *Chiftlik*, and was included in the same administrative territory as Dhrousha, the numbers might make more sense.

According to the census of 1881 (Grivaud 1998) most of the surviving villages had increased in size – although again the taxed population of 1825 is not directly comparable with the total population in 1881. Inea's decrease in population is

dramatic, but it has nevertheless survived and today thrives with a population of considerably more than 15.

Exploitation of the Landscape

Since most of the surviving structural evidence is taken to be of Ottoman origin, this discussion of how the landscape was exploited in all periods must be firmly rooted in the Ottoman period. The centres of population remained broadly the same from the medieval period onward and it seems likely that even when the settlements were closer to the coast the inhabitants worked the same parts of the landscape on the broad, west-facing slopes down to the coast.

In the Peyia survey area there was clear evidence for the cultivation, husbandry and processing of cereal crops, olives, vines, carobs, sheep and goats. Field systems abounded, and there were threshing floors and mills, field shelters, seasonal houses and *mandres*, and countless olive and carob growing across much of the area. Close to SE0049 was a 300 year-old olive tree; individual trees like this were not uncommon – olive groves were rare until the middle of the 20th century. Before that, the carob was a more important cash crop and was exported to countries as diverse as Egypt, Russia and England (Burton 1998: 214; Lang 1998: 276; Locke 1998: 11); its trees outnumbered even the olive until the 1950s (Christodoulou 1959: 167). During the Ottoman period, carob warehouses like those built in the 18th or 19th century on the coast at Keratidhi (Morris and Peatfield 1987: 201), south of the survey area, are common.

Vines are still grown along the top of the ridge in the east of the area and down its eastern slopes. There is no clear evidence of long-term vine growing, but there

are many abandoned *spitakia* in the current vineyards and Kitchener (1882) shows vines being grown in the same area, which suggests that they were established by the end of the Ottoman period. The pottery evidence confirms activity along the ridge since the Roman period, although there is nothing to show that the vineyards are this old. And there is no indication as to the age or location of the ‘ancient’ channels used to transport grape juice or wine around Kathikas, which have been spoken of by its inhabitants (Theodosiou and Pitta 1996: 19).

There appear to have been two distinct approaches to agriculture in the Peyia survey area, which seem to have been dependent upon the topography and the distance of a field from the village. As the topography changed with the underlying geology, so did the way in which the land was cultivated, and the type of buildings that were constructed. Closer to the permanent settlements on the ridge, where the bedrock is igneous and the ground steeper, the remains of field systems are clearly visible on the hillsides. Lower down toward the coast, on the gentler sloping limestone, the division between fields was harder to see, but many of the lower fields were still cultivated and cereal crops were growing in them during my survey of the area.

The two generations of terracing discernable amongst the collapsed and overgrown field systems associated with GS021 (Figure 6.32) suggest that at least two generations of land division were built before the fields were abandoned as their size and steepness made them untenable in an increasingly mechanised world. Mechanisation of farming really took hold in the middle of the 20th century; the number of tractors imported trebled between 1947 and 1956,

from 118 to 372 (Statistical Abstract 1956). It seems likely, therefore, that at least some of the surviving field boundaries were established during the Ottoman period, if not before.

There were very few field shelters near to the villages; presumably they were unnecessary because the fields could easily be reached and cultivated within the working day. Where there were buildings they were small, like the line of ruined *spitakia* built close to the road between Inea and the coast, above broad, terraced fields on the steep ground above the Potamos tis Elin Petras. These fields, it seems, were far enough from the centres of settlement for *spitakia* to be built as stores or for occasional accommodation (Given 2000).

Further from the villages, on the limestone bedrock, where the ground was flatter and the fields larger, more hands were required for longer periods to work the land, and clusters of large structures were constructed, those in GS001 and GS002 for example, or the concentration in and around GS016. It is possible that many of the buildings were occupied seasonally as the agricultural cycle demanded (Ionas 2001) since none are recorded as distinct villages or settlements. The preservation of many of the structures indicated that they had been used well into the 20th century, but pottery that could date from the medieval and Ottoman periods suggests that the area was used well before that.

Distance from the village cannot have been the only factor affecting the chosen method of farming, since the larger structures appeared as soon as the bedrock changed from basalt to limestone; it was, perhaps, more to do with the relative productivity of smaller, steeper terraces compared with the larger, flatter fields.

Larger fields would have required more workers for longer periods at distances from their homes that would have made commuting impractical, and accommodation essential. More equipment would have been required too, necessitating storage facilities for it as well as produce from the fields.

The transition between the two farming zones was particularly obvious in GS003 where a small basalt construction (SE0075) sat toward the end of a ridge in the east of the square and a larger structure, built mostly of limestone (SE0011), was situated some 200 m to the southwest where the ridge had flattened out. The ground was as steep in GS017 as it was closer to the villages where the slopes had been cultivated in the past. The square was well watered, and yet there was virtually no sign of habitation or agricultural activity in it. Immediately to the southwest, by contrast, in and around GS016, where limestone dominated, the rolling fields had been intensively farmed and occupied at least since the Roman period.

No threshing floors were marked on the cadastral plan around GS016, yet one was definitely identified, as were possible sites for several others. Threshing usually took place on the edge of the village (Given 2000), but where seasonal settlements were established the grain was threshed locally, as at Kato Koutraphas *Mandres* (James 2001) close to the Nikitari survey area. At approximately 12 m diameter, the recorded floor (SE0048) was well within usual size range for a family threshing floor (Given 2000). It could be then that this area was covered in small farms, rather than included in a large estate. If the threshing floors had fallen out of use by the early 20th century, they might not have been included on the cadastral plan, but the mills nearby are, so presumably were still in operation. The mills must have had an extremely wide catchment

area; they seem to be the only mills marked on the cadastral plans of the Peyia survey area, they were easily accessible from all directions, and stood on one of the few perennial streams in the area. So, it is quite possible that whilst grain was still brought here to be milled, it was no longer grown, threshed or winnowed in the immediate vicinity, and that sufficient time had passed since the practice had stopped for the threshing floors to be, without doubt, beyond use.

Most structures in the Peyia survey area – igneous *spitakia* and limestone houses alike – were built on less productive or transitional zones on the margins of the worked land. Large structures were often built into the slope to lessen their impact on the cultivable land. The line of *spitakia* west of Inea ran along the break in slope and several structures recorded in GS001 and GS002 were built on a small, rocky step in the slope between two wide flat areas that were planted with carob and cereal crops. Two structures (SE0017, SE0018, Figure 6.14) took this marginal location to an extreme and were built into the southern lip of the gorge of the Potamos Kalamoulli; on one side was a broad expanse of flat, farmed land, on the other a sheer drop of about 100 m to the river below. Their location within the forest boundary dates their construction to the Ottoman period at the latest, but they were far more dilapidated than many in the area so perhaps the inauspicious location led to their abandonment at an even earlier date.

Whilst SE0017 and SE0018 overlooked the gorge, SE0049, built right on the edge of the north side of the Kalamoulli gorge overlooked the fields in which its occupants, presumably, worked. This and at least one other, unrecorded structure were larger than the examples on the south side of the gorge, much better preserved and clearly part of the concentration of structures in and around GS016

where, again, building was mostly confined to slopes between the fields or on less obviously productive land. The importance of accessible, cultivable land, and the efforts to which past inhabitants went to conserve it is illustrated by the small pocket terraces that were built on extreme slopes between far larger, more accessible areas of land. In GS010 and GS013 pocket terraces, some planted with carob trees and other, larger examples that may have been used for vegetable or cereal crops, had been built on slopes that were all but cliff faces.

In 1889 Hogarth noted the remains of an ancient village on Lipati's southern edge (Fejfer 1995: 57) where Kitchener (1882) marked Toxeftra *Chiftlik*. Tracks are still labelled as coming from Toxeftra *Chiftlik* on the margin of the cadastral plan, although its location is not marked on the adjoining sheet. It is possible that the *chiftlik* controlled the whole area around GS016 and Lipati, which incorporated agricultural land, with olives and carobs as well as the cereal crops, the mills and probably large *mandres* too. Activity in the area, and a degree of habitation continued into the 20th century, but it would seem that the *chiftlik* was abandoned and ruined before the end of the Ottoman period.

Today Lipati is covered with well-spaced carob trees, but the ground beneath them is all but stripped bare by the goats kept there in large modern *mandres*. There are some older stone structures and a series of long, low walls, which could easily be the vestigial remains of a large pastoral operation based on the plateau before the arrival of the British. Whether or not they were part of the same enterprise this would clearly illustrate the physical separation of pastoralism from agriculture and habitation; the *mandres* were raised up,

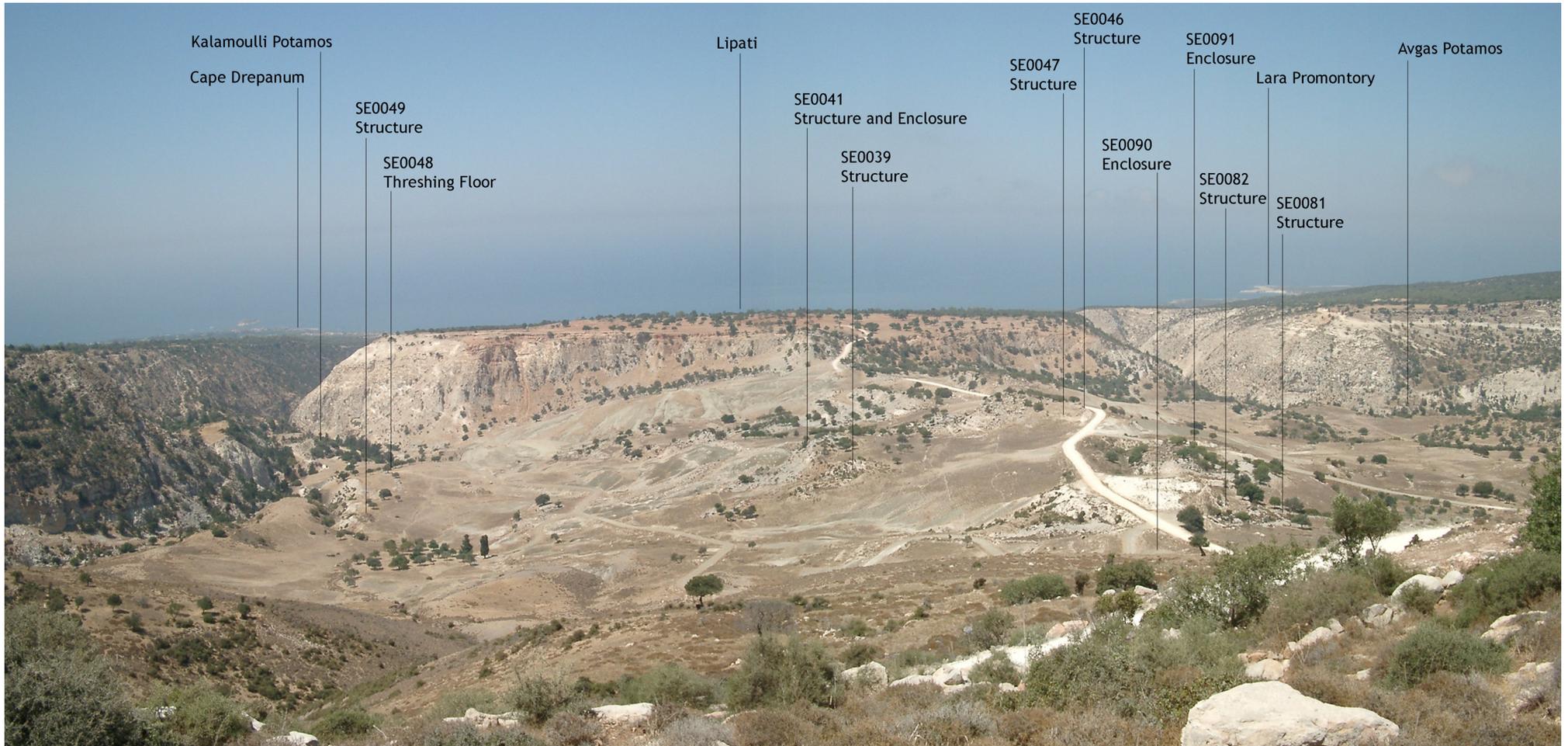


Figure 6.36 Looking westward toward Lipati, across GS016 and the area to the south, see also Figure 6.22 and Figure 6.26.

separated from the cultivated fields on a transitional zone between field and forest. The sheer sides of the gorges prevented anything but east/west movement. To the east there was a single, narrow path leading down into the world of agricultural production and process, but for the most part the goats would have been restricted to the westward route off the plateau, into the prime grazing ground of the forest.

The situation on Lipati may be spectacular, but it is not unusual; many abandoned *mandres* stood on or close to what is now the boundary of the state forest. Before the formalisation of the boundary and the reforestation initiative implemented by the British authorities, goats grazed in the forest (Thirgood 1987) and much of what is now rough pasture was agricultural land. Where the *mandres* were associated with agricultural structures they tended toward the forest side of any clusters so that there was a clear path for the goats to reach their pasture without passing by, or through, growing crops. After the harvest the sheep and goats could just as easily be driven into the fields to graze down the stubble and manure the fields (Christodoulou 1959: 180).

On the outskirts of Kathikas village more recently abandoned *mandres* (e.g. SE0043) were still situated on the margins of the settlement, between the village and its fields. They were larger than many of the examples lower down in the survey area and perhaps represented an initial phase of consolidation of flocks after the forest was first put off limits for grazing. Alternatively, it could reflect less reliance on pastoralism in a village that was surrounded by vineyards and arable land with limited access to the forest.

Aside from grazing the forest was used as a source for building materials and fuel as well as for the production of charcoal (Thirgood 1987: 195). The charcoal production was probably on a small scale, for although evidence of copper smelting during the Roman period has been found close to the Peyia area it was on a domestic, self-sufficiency level (Adovasio *et al.* 1978; Fejfer 1995) and, unlike the Adelphi forest in the Nikitari survey area, the Peyia forest was never called upon to supply fuel for large-scale copper production.

Community and Communications

Without clear material evidence it is hard to trace communities in the Peyia survey area with any degree of certainty. The Roman period is most clearly represented by the sophisticated settlement at Cape Drepanum that would have been home to several layers of social, as well as numerous professional communities. If Cape Drepanum was the focus of local settlement then it is probable that communities of farmers and herders working in the interior of the survey area were closely associated with the town even if they did not actually live there. There is clearer evidence of occupation and exploitation of the landscape for subsequent periods, but it is impossible, with the survey results available, to distinguish concrete differences between the medieval, Ottoman, and later patterns of use across the whole landscape.

The nucleated villages on or close to the ridge in the east of the survey area became the sole, permanent area of occupation from the medieval period onward. Each village was the focus of its own settlement level community, within which there were various nested communities based upon profession, age, gender and social standing. There are no stark differences in the topography of the survey

area, unlike the valley/plain juxtaposition in the Nikitari area or the mainland/island split on Akrotiri. As a consequence each village would have exploited the landscape in broadly similar ways, which presumably resulted in an intricate series of relationships between communities.

The structural remains show that agriculture and pastoralism were important in the area. *Mandres* along the edges of villages or cultivated land marked the transition between one level or profession and another. On the edge of the village the herding community was physically close to its village community, but when *mandres* were built further away from the settlement they stood on the boundary between cultivable and rough, grazing ground, at the transition between the world of agriculture and that of pastoralism. These *mandres* were often associated with seasonal settlements, which suggests that despite the differences in profession the community bond of the village drew them together. It is probable that other, invisible, community ties such as those of marriage, shared labour or land ownership also led the different professional communities being based so close together.

The concept of ‘imagined’ communities allows for a broader community of farmers, for example, to be drawn from all the settlements in the area, without affecting their bonds with their own village community. The professional ties that underlie such an association would be clearly visible in the landscape spreading far beyond the village community’s focal area. Whilst they may be known about and recognised by local inhabitants, the artificial boundaries between villages are seldom visible on the ground, and the homogeneity of agricultural cover allows the community of farmers to identify their space that unifies the landscape as

broad swathes of fields are ploughed, or as crops grow, ripen and are harvested. Whilst agriculture may have unified communities in such broad and visible ways, it seems that the mills might have formed a point of unity in a far more focused way. It appears that the mills at Koloni (GS016) were the only ones in the area. If this is the case, the milling community would have been very small, but the community brought together by their use of the facility would have been drawn from all parts of the population of all the villages along the ridge.

A clear hierarchy was present in the survey area during the medieval period, when the social levels of estate holders, *francmati* and serfs formed three distinct communities, the members of which were all also in some way part of, for example, the farming community. These communities would, with due adaptation, have survived into the Ottoman period when the hierarchy of the *chiftlik* would have been reflected in the social communities of the owners and the workers. In this period another community would have re-established itself with the reintroduction of agricultural smallholdings to the landscape (Christodoulou 1959; Gazioglu 1990).

Much of the interior of the Peyia survey area, comprising most of TZ1 and TZ2, is inaccessible to most modern vehicles; the extensive network of paths, tracks and roads leading through and across the area are on the whole in poor condition, despite their classifications on the current 1:50,000 topographical map. Many of these small roads are marked on Kitchener’s (1882) map, especially on the slopes immediately to the west of the ridge, where today there are more, better maintained roads than elsewhere. Their appearance on Kitchener’s map indicates a well-established system by the end of the 19th century. The flow of these

interior tracks was, perforce, east/west, as north/south travel was severely limited by the deep gorges that form the most spectacular part of the drainage down from the ridge. This is something that did not change between the Roman and Ottoman periods. The cadastral plan shows few tracks that actually cross the gorges anywhere but at the shore or toward their source; notably, however, there are crossings immediately to the west and to the east of Lipati. The former is the ancient route that runs from Cape Drepanum to Pano Arodhes (Bekker-Nielsen 2004: 133, map 13) and the latter heads northeast across the area of activity in the vicinity of GS016.

The main north/south routes skirt the survey area, one each along the coast and the ridge; interestingly they still follow much the same route as those laid down, or at least formalised, during the Roman period (Bekker-Nielsen 2004). It has been suggested that local north/south trips by boat rather than by road would have been likely (Morris and Peatfield 1987: 203), but given the uncertainty of the settlement at Lara and the decline of that at Cape Drepanum, it seems more likely that such trips simply would not have happened after the Roman period. The move of settlement inland was almost certainly the reason that the road northward from Cape Drepanum had been abandoned by the Ottoman period (Fejfer 1995).

The continued exploitation of the Akamas peninsula (Gibson 2005) and the presence of the villages along the ridge ensured the survival of the upper road after the Roman period. It not only provided communication routes for landowners and producers, to transport their surpluses to markets and fairs, but also gave them access to the network of roads that led throughout the island.

Additionally the roads facilitated the collection of taxes and tithes, and their transport to central storage when they were paid in kind. Here the network within the survey area would also have come into play as crops were taxed at the threshing floor under the Ottomans (Given 2000), which, given the number of small clusters of agricultural dwellings and seasonal settlements must have been numerous, and would have been approached down the drainage from the road along the ridge.

The Changing Landscape

Occupation and exploitation of the landscape are closely interrelated and a change in one will doubtless affect the other. The most obvious signs of change in the Peyia survey area belong to the period of British rule when the authorities limited access to the forests, and developing technology changed the face of agriculture. With these changes the role of particular areas of landscape in the local economy shifted dramatically. The forest was largely removed from the equation; grazing was all but forbidden and other exploitation of it severely limited (Thirgood 1987). Tractors, mechanised harvesting and threshing machines were faster and more effective than traditional methods, but it was either impractical or unprofitable to use them on small, scattered fields. This led to the virtual desertion of many of the seasonal settlements in the lower parts of the survey area and the encroachment of grazing goats, evicted from the forest, onto the now abandoned arable fields.

Whilst the changeover was not as simple or as immediate as this brief summary seems to imply, one example of the end result of this pattern is evident on Lipati and in the land around GS016. Any goats kept on the plateau in the Ottoman

period or before would have been largely excluded from the farmland to the east, and they would have been taken westward into the forest to graze. Today the large flocks of goats are excluded from the forest by law and are taken eastward across the erstwhile farmland and abandoned structures to graze on the coarse grass and shrubs that grow there now. Taking this shift to an extreme it seems likely that the working *mandra* close by the two mills northeast of Lipati sits on top of a third mill, which is marked on the cadastral but not evident on the ground.

The huge changes of the last 100 years or so mask much of what has gone before, but it does seem that the economy of the Peyia survey area remained fairly constant between the Roman and Ottoman periods as farmers and herders, from the permanent settlements, maintained a constant, small scale, and possibly seasonal presence in the interior. The favoured settlement form changed from small farmsteads and large estates under the Romans, to feudal estates with a servile work force in the medieval period, but agricultural smallholdings were again established amongst the *chiftliks* under the Ottomans (Christodoulou 1959; Gazioglu 1990), and overall the agricultural and pastoral exploitation of the landscape remained constant.

Change is more evident in the centres of population; these were mostly on the periphery of the Peyia survey area, and, during the Roman period, outside it at Cape Drepanum (Hadjisavvas 1977). There has been little change in the pattern of settlement since the medieval period when villages and estates were established on the ridge in the east of the survey area. Whilst the settlement at Cape Drepanum may have remained occupied until the late 16th century (Grivaud

1998), there was a clear shift to the higher ground for which the archaeological evidence recorded offers no clear explanation. Frequent Arab raids between the 7th and 10th centuries (Hill 1940) are widely accepted to be the main reason for the Cypriot population's move away from the coast during the Byzantine period (Drury 1972: 166), but an increase in the number of permanent settlements by the medieval period suggests that other factors, not least a growing population, must have played a part as well.

Water supplies are notoriously fickle, but it is reasonable to assume that the higher ground was always well served by permanent springs for the whole year. As it is evident, on a local scale, that structures were built at the edges of cultivated fields, it is equally possible that villages were established on less productive land. To have built settlements close to the coast would have been to take easily cultivatable land out of commission; far better to establish permanent settlement on the higher, steeper ground, and to occupy the agricultural zones on a seasonal basis, having only the minimal impact upon agricultural production. With Polis and Pafos both within easy reach from the ridge, there was perhaps no need for a further port at Cape Drepanum, which would account for its decline and the abandonment of the coast road (Fejfer and Mathiesen 1995: 73, 78).

It is quite possible that the landscape has changed little since it was occupied and worked, but today it has an air of abandonment and inaccessibility. The forest is thicker now that grazing is restricted and trees are no longer prey to those in search of timber, fuel or resin. When it was a resource to be exploited it would have been a permeable, frequented, if unoccupied area; now its density is isolating and the trees formed an impenetrable belt across the survey area,

passable by just a few rough roads. When the forest was thinner, the field boundaries maintained, the buildings stood to their full height and, most importantly, when there were people living and working in them all, the whole area would have appeared far more of a coherent unit and the idea of communities existing, interacting and overlapping in the landscape would be far more tenable.

7 Changing Settlement and Shifting Community in the Cypriot Landscape

It is clear, and not in the least surprising, from the preceding chapters that settlement and its distribution was very different at the end of the 19th century from what it had been under the Romans. Yet the islanders' dependence on the land, and the need for a majority of the population to be located within, or close to, cultivated areas or exploitable raw materials mean that similarities can be traced through all periods. Despite the havoc wrought by natural disasters such as earthquake, plague and famine (Grivaud 1998: 431-440), and the hostile attentions of coastal raiders and conquering powers (Kyrris 1996), settlement habits remained largely stable, with the one notable change between the Roman and medieval periods. Of course, nothing is completely static and changes occur even within a stable system, from small, day to day shifts that pass unnoticed, to the large-scale events that herald the end, or beginning, of a period of quiescence (Chapter 2; Roberts 1996: 120).

Archaeological survey is best suited to registering large changes in settlement patterns across the landscape, rather than the constant shifting and alteration of individual settlements within an outwardly stable system. The changes apparent in Cyprus are two-fold: there appears to have been a considerable shift, almost a step change, in the focus of settlement location between the Roman and medieval periods, which was partially overlapped by a general move toward greater nucleation from the Late Roman period onward. In this chapter, using examples from across the island as well as from my own survey areas, I consider these changes in three broad sections. Firstly I trace changes in settlement pattern and

form from the Late Roman to the Ottoman period, considering their possible origins in rules of land tenure, taxation and a fluctuating population. I also consider the effect of the material changes in settlement on the presence, form and manifestations of community in the landscape. Next I approach the relationships between land use and settlement; how prevailing habits of exploitation affected boundaries, distribution, and the formation of associated communities. Finally I address the step change in settlement focus that took place between the Roman and medieval periods, assessing factors that may have caused it, in addition to the oft-cited Arab raids, and briefly comparing it with a later desertion of low ground in the face of the Ottoman invasion.

Changing distributions of settlement in the landscape

Settlement patterns in Cyprus have always been largely dispersed. From the farmsteads of the Roman period to the medieval villages, centres of habitation were located within the landscapes that they exploited, necessitating a substantial separation of each settlement from its neighbours. The form of individual settlements has, over time, tended toward nucleation thus making the broader pattern still more dispersed as isolated farmsteads were abandoned, and villages established at wider intervals.

The nature of the sources makes population a difficult criterion by which to judge settlement habits. There are village lists, counts, estimates and travellers' accounts, but many of them ignore large sections of the population, such as

women, children and the elderly, simply recording men of working age (Christodoulou 1959: 51; Grivaud 1998: 70, 77; Hill 1948: 787, 875; 1952: 31; Papadopoulos 1965: 37-77). Early figures are so approximate as to be of little practical use, but it is possible that the population reached 250,000 during the Roman period, and had risen to 400,000 by the 14th century (Christodoulou 1959). The population had dropped significantly by the end of the 15th but estimates show an overall upward trend during the 16th century to about 200,000 (Hill 1948: 787-788). This rise was halted by the Ottoman invasion, when numbers initially dropped sharply, and then continued to fall until the middle of the 18th century, from which time they began to recover. The first statistically based census, taken by the British in 1881, registered a net drop in population under Ottoman rule (Christodoulou 1959: 51; Hill 1952: 34; Papadopoulos 1965: 36, 78, flyleaf), but it was not as catastrophic as the accounts of some western European travellers seem to suggest. Many travellers were concerned to emphasise the failure of Turkish rule in Cyprus and, despite the 18th century upturn, sought to incorporate depopulation into their litany of evidence against the regime. The Reverend Clarke's (1998: 124) summary perhaps sums up the prevalent opinion of the period most succinctly: 'Agriculture neglected – inhabitants oppressed – population destroyed – pestiferous air – contagion – poverty – indolence – desolation.'

Land ownership and exploitation of resources varied across the Roman Empire throughout its period of dominance, but the pattern of dispersed estates and small farms paying tax to central government through provincial authorities based in nucleated towns and cities, which was prevalent in Cyprus, was a common one (Alcock 1993: 220-224; Michaelides 1996; Mitford 1980; Swiny and Mavromatis

2000: 447; Whittow 1990: 28). Whilst the dispersed pattern persisted there was a gradual shift toward nucleated forms of settlement from the Late Roman period, as villages replaced scattered farms and working units. At this juncture it is worth reiterating the distinction between *form*, which pertains to the nature of a single settlement, and *pattern*, which addresses the distribution of a number of settlements across a landscape (Chapter 2; Knapp 1997: 24; Roberts 1996: 24)

In the 5th century A.D. the tax burden shifted from individual farmers to groups of farming settlements, and in the 7th century to the village when assessment was expanded to incorporate all production, and included press-houses, orchards and barns in addition to agricultural units (Swiny and Mavromatis 2000: 442). Landholdings and estates became larger, and small farmers lost their independence, as the state, the nobility and the church increased their holdings through the Late Roman and Byzantine periods. The shift from small landowners to large-scale estates paved the way for the feudal system introduced by the Lusignans in the 12th century (Christodoulou 1959: 70; Karouzis 1977: 22).

The medieval period was characterised by a dispersed pattern of nucleated villages belonging to feudal estates. The initial distribution of land in the medieval period was largely concerned with establishing control over the indigenous population. The major landowners were still the crown, church and aristocracy, and their hereditary estates were worked by serfs and freemen who were tied to their village (Christodoulou 1959: 71; Karageorghis and Michaelides 1996; Karouzis 1977: 28). The system was conducive to nucleation, and the increasing population naturally led to a growth in the number of villages, which facilitated the convenient collection and control of taxes and tithes and indeed, of

the workforce themselves. Within this social hierarchy the village was a prime identifier and defining bond for more than one community that clearly spread beyond the physical extent of the centre of habitation. Within the extended household of the estate community there were, broadly speaking, three socially derived communities: those of landowner, freedman and serf.

Even this coarse level of community division is hardly visible in my survey data; in the villages that persist post-medieval construction has largely obscured any material from which the presence of community might be inferred. Presumably the size and standard of dwelling would have given clues to the social community to which its occupant belonged. At Kolossi, just outside the Akrotiri area, there was at least structural evidence for the ruling class in the shape of the 15th century castle, but no such centre was identified for any of the other estates. This reduction to three levels of community evident in the historical records is oversimplistic and the inclusion of each individual in or their association with other communities, based on profession or gender for example, would have made the interrelation between nested and overlapping communities far more complex than it appears here.

Many medieval villages have disappeared, but comparative maps (Grivaud 1998) show that the distribution of villages today represents a substantial remnant of the settlement pattern in medieval Cyprus. In addition to the documented vanished villages (Grivaud 1998) there is a handful, including Lakxia tou Agrioklimatou (SE0070), Vouni (TP031) and Mutallia (TP125) in the Nikitari survey area, which have been located in the field but do not appear on the medieval lists. These were found in the mountains, which suggests that their survival is due to

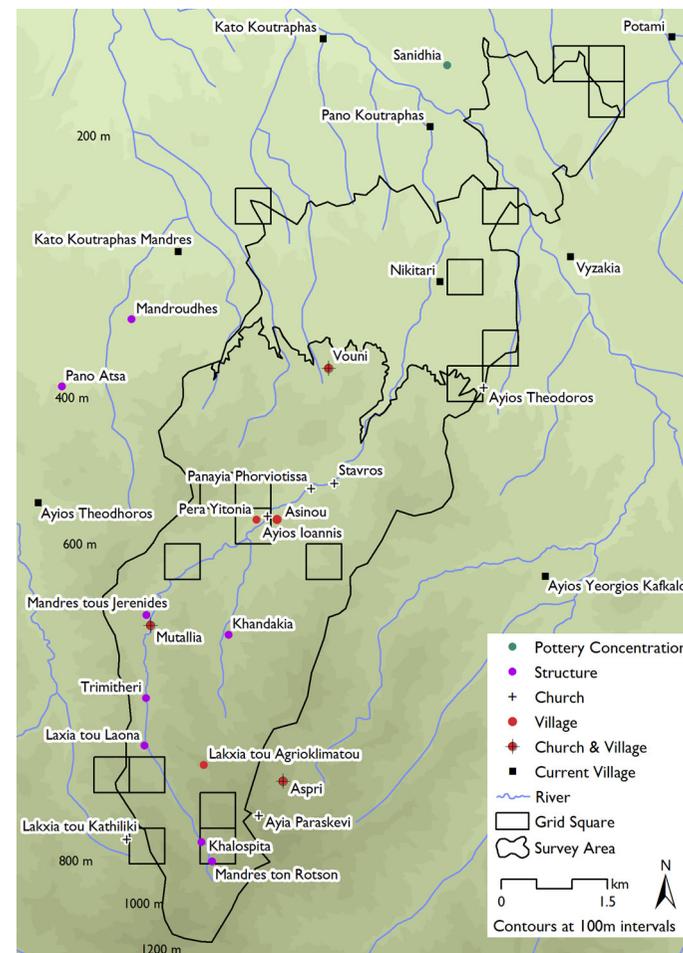


Figure 7.1 Settlement in and around the Nikitari survey area.

the lower levels of continuing exploitation away from the plains, and may indicate that other, similar settlements existed in regions, such as the other two survey areas, where continued cultivation has erased all trace of them. This presents the possibility of a far denser distribution of settlement across the island than the medieval lists suggest. Substantial though they may be, these remains may have been unlisted because they were seasonal settlements and registered as part of a permanent village. The pottery evidence from all three indicates that they were occupied during, and possibly after, the medieval period, and the structural remains at Vouni and Mutallia suggests permanence. Both villages had churches; Vouni was located on the margin between the forest and the plain, which would have provided year-round resources between them, and Mutallia sat at a node in the local communication network, near a point where several tracks came together to cross the Potamos Rotson. The situation was less clear at Lakxia tou Agrioklimatou, but it was comparable in size to the other two settlements, and in location to Aspri (TP066), which was included on the village lists.

Two possible explanations for the absence of these villages from the lists present themselves, but the confirmation of either is, unfortunately, beyond the scope of this project. Firstly, the lists record the number of *francomati* resident in each village; if no *francomati* lived there – if, for example, the entire population consisted of serfs – then the village might not have been included on the lists. Secondly, there could be some, unspecified, reason for not including a village on the lists. It is unlikely that these settlements were unknown to the estate holder, but could an individual landowner perhaps have omitted certain villages from the lists to hide the full extent of his income from the state, as a form of tax

avoidance? It is possible that there was a tradition of ‘unwritten’ villages (Given 2004: 120-126) during the medieval as well as the Ottoman period.

Many of the surviving villages are known to have been situated at the centre of a medieval estate. The higher status of such a village might have been sufficient to ensure its survival, but it might also be that the estate would have been founded at a location favourable to longevity. Episkopi, Kolossi and several of the villages along the ridge in the west of the Peyia area were medieval estates (Goodwin 1984) and all stood along two major communication routes that date back to at least the Roman period. This preference is not unique to the medieval period; Kourion and the settlement at Cape Drepanum were both on the Roman coastal road (Bekker-Nielsen 2004: 133-136, 196-197, map 13, 25), and many of the villages that survived into the Ottoman period were those of medieval foundation that had stood along major communication routes.

There is a possibility that the roads, as well as providing a link between the communities that were spaced along it, were also the focus of yet another layer of community. Those passing along a particular route, especially those who did so regularly, and no matter what their profession or social rank, would have had an identifying link with each other. Their movement through and experience of the landscape bound them together in a truly imagined community. Whereas the community of a village could conceivably be expected to assemble in its entirety, the likelihood of a similar gathering of the users of a particular route is most unlikely, but they nevertheless constitute a large community. This is a prime example of the reciprocal relationship between the population and the landscape. The landscape was changed when the route was established, but the longer it

exists the more the route becomes part of the landscape and the larger its associated community becomes.

Such auspicious locations afforded fief holders the opportunity to display their wealth, status and power to all who passed along the route as well as to the more immediate village. It also meant that those members of the community who needed it had easy access to the main road network that spread across the island. Whatever fringe benefits were to be had from being located along arterial routes, however, all the estates derived the majority of their income from the land around them; by building nucleated settlements on, or close to, the road a minimum of productive land would have been taken out of service, thus increasing the potential agricultural yield.

Opinions differ on the effectiveness, fairness and clarity of land tenure under Ottoman rule, but there was a general shift away from servitude to ownership for the peasant classes. Despite the granting of hereditary rights to tenant farmers, the medieval system of land ownership effectively carried on well into the Ottoman period; much of the land was state owned, but often medieval fief holders were simply replaced by *sipahis* (cavalry officers), *vaqfs* (religious bodies) or the Orthodox Church. Real reforms, and a new code enshrining land use and ownership categories, were not introduced until the middle of the 19th century, some 300 years after the Turks' arrival and 25 before their departure (Christodoulou 1959: 72; Gazioglu 1990: 119; Hill 1952: 21; Karouzis 1977: 29; Sant Cassia 1986).

Given the similarities in land tenure between the Ottoman and medieval periods, it was the falling population that had the greatest impact upon settlement patterns from the 16th century onward. Nucleated settlements were, by this time, the norm and the drop in population led to the abandonment of villages rather than the dispersal of the remaining population to exploit the maximum area. As discussed in Chapter 4, the ties of community and the interdependence fostered by the nucleated settlement appear to have proved stronger than the possibility of increased exploitable resources. It seems likely that the less favourably located villages were the ones to disappear, those in less hospitable surroundings for example or further away from the road system. Diminishing competition for resources made it unnecessary to exploit the more extreme locations, and therefore unnecessary to live there. In the Peyia area Koloni (GS016) and Ayios Yeorgios (SE0026) both disappeared from the village lists after the middle of the 16th century (Grivaud 1998: 247-248), and both, whilst amongst cultivable land, were located away from the ridge road. In the Nikitari area most settlement in the valley south of Nikitari village appears to have been abandoned at this time; the falling population would have made it unnecessary to venture so far into the mountains for the same resources, and the nucleated settlement at Nikitari gave easy access to both plain and mountain.

The power and influence of the villages on which medieval estates were centred perhaps explains why some of them still survive today. Some of those that have disappeared may well have provided the basis for seasonal settlement or working units under the Ottomans. Koloni (GS016) and Ayios Yeorgios (GS019), located on agricultural ground, were perhaps finally abandoned in favour of the larger villages on the ridge thus freeing up more cultivable land as well as putting the

centre of habitation on the main communication route. The remains of field boundaries, structures and mills in the locality of Koloni indicate that it was occupied and worked into the 19th century, if not the beginning of the 20th, suggesting that its status had changed from permanent to seasonal village, which might explain its omission from the Ottoman register of 1825 (Grivaud 1998: 471). A similar situation may have existed at Kato Koutraphas *Mandres* (TS07), close to the Nikitari area, which was a substantial seasonal settlement up to the middle of the 20th century (Given 2000: 218; Ionas 1988: 20; James 2001). According to Michalis Christodoulou Pantziaris, a resident of Tembria village whose father owned land at Mandres, however, it was accorded official village status for a brief period during the 1930s and 1940s.

It is possible that new ownership and the falling population during the Ottoman period resulted in some medieval villages providing the basis for *chiftliks*. This seems to have been the case at Phasouri, and it is likely that Prus village in the Peyia area (Grivaud 1998: 226, 248; Kitchener 1882), under new ownership and with a population too small to be registered on the village lists, survived as Prou *chiftlik* (Goodwin 1984; Kitchener 1882). The census of 1881 recorded only 42 occupied *chiftliks* in the whole of Cyprus (Grivaud 1998: 478), but others, including Prou and Toxeftra, close to Koloni, are marked on Kitchener's (1882) map. This would suggest either that the first British census was not as thorough as is claimed, or that some of the *chiftliks* recorded by Kitchener were already close to desertion, continued only as seasonal establishments, or were recently abandoned, surviving only in the memory of the local populace.

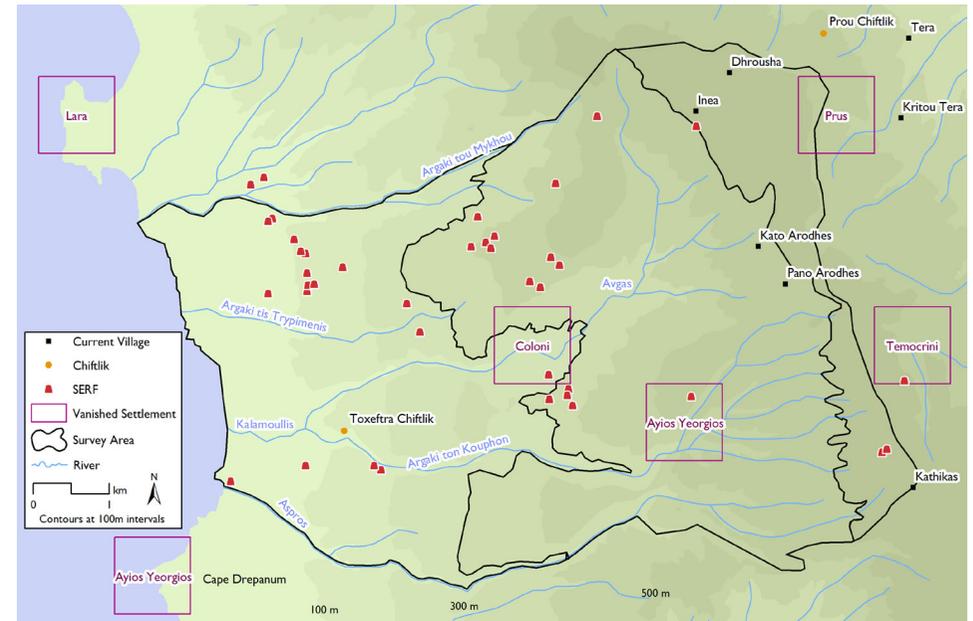


Figure 7.2 Settlement in and around the Peyia survey area. Data for vanished settlements is taken from Grivaud (1998), which gives location to the nearest kilometre.

As the Ottoman period progressed, the new rules of land tenure (Christodoulou 1959: 72) and the increasing size of the population after the middle of the 18th century (Papadopoulos 1965: flyleaf) brought a degree of stability to the settlement pattern in Cyprus. Whilst some *chiftliks* and even some villages still failed, the number of settlements that vanished in the 19th century was only a fraction of the number that disappeared in the preceding 200 years. By the end of the Ottoman period the dispersed pattern of nucleated villages that survived and, largely, flourished well into the 20th century was established, and small, working

settlements reminiscent of the kind of farmstead common in the early centuries A.D. had all but disappeared.

Relationships between settlement and land use

Cyprus has always had a largely agricultural economy and the link between the exploitation of the land and settlement is undeniable. Roman cities were net consumers, taxing and redistributing, amongst other things, the produce of the dispersed farmsteads. In the medieval period the village became the redistribution centre and focus of the farming community, and whilst the village remained the centre of focus in the Ottoman period, taxes were once more collected by a central authority.

The vision of Roman Cyprus consisting of urban centres amidst an agricultural landscape is incomplete. Whilst agriculture was undeniably important to the population, towns were not the only non-producing consumers in the system. Large population centres were clearly identified in the Akrotiri and Peyia areas but there was nothing similar in the Nikitari area despite the presence of several Roman farmsteads (Given 2003a; 2003b). These farmsteads were to the northwest of the area and probably formed the basis of a farming community that supported the copper mining and smelting operation at Skouriotissa (Bruce 1937; Kassianidou 2000). Neither a town nor city, the mines nonetheless had a large working population that required feeding. The farmsteads identified by TAESP on the edge of the Mesaoria were almost certainly placed strategically around the mine; they were close enough to minimise the effort of transporting produce to the point of consumption and far enough away to be sited at the centre of the land that they worked. The separation from the mine may also have been an attempt to

reduce the ill effects of the industrial process upon their crops; there is evidence that similar precautions were taken in the siting of houses near metal workings in the Lagoudhera valley to the east of the Nikitari survey area (Graham *et al.* 2001).

The farmsteads around Skouriotissa were only part of a network of farming communities all around the margins of the Mesaoria ideally situated to support the Roman copper mining communities along the northern foothills of the Troodos. The network continued to the east where farmsteads traded their agricultural surplus with Tamassos, which derived most of its wealth from copper production (Given and Knapp 2003: 282). The agricultural settlements tended to be sited in the foothills, overlooking the plain (Given and Knapp 2003: 307), through which ran the road connecting Tamassos to Soloi (Mitford 1980: 1331-1337), the most probable point for goods from this part of Cyprus to leave the island. Much of the land around Skouriotissa lies in the Buffer Zone, but some archaeological survey has, nevertheless, been possible and it seems reasonable to assume that the network of farming settlements continued to the north to support and supply Mavrovouni mine and Soloi, interacting with them in much the same way that those communities to the east interacted with Tamassos.

Whilst not on the same scale as the cities, towns like Katalimata and Katalimata ton Plakoton on Akrotiri, and Ayios Yeorgios at Cape Drepanum would also have been net consumers. It seems likely that their inhabitants were employed in the operation and servicing of the nearby ports and harbours and these non-producing workers would have necessitated a supporting farming community. No concrete signs of farmsteads survive in the landscape around Cape Drepanum,

perhaps suggesting that farmers lived in the large settlement (Bekker-Nielsen 1995: 116) and used the coast road to gain access to agricultural land to the north of the town. A similar situation appears to have prevailed at Kourion, where no farmsteads have been found in the immediate vicinity of the city, but at least ten Late Roman or Early Byzantine examples have been recorded between 4 and 8 km from the city (Swiny and Mavromatis 2000: 449), beyond daily commuting distance. In the south of the Akrotiri area the limited cultivable land and the density of settlement suggests a different arrangement. Whilst some of the smaller sites (Last 1954) could have been farmsteads or farming villages it is more likely that they were mixed communities with a proportion of the population employed on the land, travelling the short distance to the fields each day, whilst the remainder worked in the harbours.

There seems to be some correlation between the separation of farmsteads from Roman cities and the distance that many seasonal settlements and *spitakia* occur from medieval and Ottoman villages. The nucleation of the population into fewer centres in the Ottoman period may have facilitated the collection of taxes by the central authorities, but it also increased the necessity for field houses and seasonal settlements. More settlements spread more densely across the landscape would have enabled more workers to tend the land whilst based in their village. The decrease in the number of villages makes it inevitable that some cultivated land was further from the centres of habitation than before. *Spitakia* and seasonal villages were a practical response to this; in the Peyia area field shelters were noticeably thinner on the ground within 2 km of the villages. Similarly, field structures were rare in the Nikitari area where none of the current agricultural land within the village boundary was further than 2 km from Nikitari village.

Other village territories close to Nikitari, and also those in the Akrotiri area, were small enough for any cultivated land to be within a similar distance of the village centres. Modern administrative boundaries, formalised by the British, were based upon existing landholdings and village limits. This may explain why there is very little structural evidence from the Ottoman period in fields close to the main centres of habitation, although intensive, modern cultivation of the land will also have had a detrimental impact upon the survival of such evidence. It is worth noting that Kato Koutraphas, to the northwest of the Nikitari area, covers a greater area than some of its neighbours, but it does have the seasonal settlement of Mandres (TS07) within its territory. The people that worked at Mandres came from mountain villages rather than Kato Koutraphas but, wherever they came from, the positioning of the two settlements means that nowhere in the territory is more than 3 km from a centre of habitation. It seems likely that 2-3 km was considered a reasonable distance to travel to the fields on a daily basis.

Check dams and terracing indicate a certain amount of cultivation along the Rotson valley, but it was probably no more than subsistence level production. Whilst the small structures appear to be Roman in origin the terrace walls are not so easy to date, and may belong to the phases of reuse during the medieval and Ottoman periods. It is possible that these were shepherds' dwellings. The forested foothills and mountains were prime grazing territory, and flocks were still taken there into the 20th century (Thirgood 1987). The absence of specialised items, such as milking vessels, amongst the small amount of pottery recovered refutes this however, suggesting that pastoralism was not the prime occupation of the inhabitants in any period. Smelting at the Roman copper mines would have required large quantities of charcoal for fuel and one possibility is that the

mountain settlements were primarily concerned with its production, as well as the extraction of resin and timber. These last two would have become more important in later periods as the demand for charcoal fell with the closure of the mines.

The structures in the Rotson valley were unlike any *mandres* recorded in the Peyia survey area, which were assumed to be from the Ottoman period, where there was little variation in the overall design of one or two shelters and an attached enclosure (e.g. SE0014, fig. 6.12; Ellis Burnet 2004: fig. 103). It seems unlikely that sheep and goats were not grazed in the Rotson valley, however, and the second phase of building at Trimitheri (TP220) (Given 2003b: 10) appears to have been a double pen suitable for housing them. The difference in form may be because the Nikitari examples were originally of Roman construction, whilst the Peyia *mandres* were much more recent. Alternatively there might have been different approaches to herding between the two areas; perhaps the animals were never penned in the mountains, for example, although ruined *mandres* are common in the Makheras forest, and they tend follow a pattern similar to that observed in the Peyia area (Ellis Burnet 2004: 106-110). Kykko Monastery is known to have owned huge flocks in the 19th century (Thirgood 1987: 109), but it might be that the structures in the Rotson valley indicate that in earlier periods the mountain flocks were smaller and did not require anything on the scale of the *mandres* found on the west coast.

Assuming, from the many locality names, that at least some of the structures in the Rotson valley were *mandres*, their location is in keeping with a general pattern that saw livestock and their quarters kept separate from living areas and

cultivated land. In the Peyia area *mandres* that are still in operation are located several kilometres outside the villages, although the separation was by no means always this extreme; there were abandoned *mandres* on the margins of the built up area of Kathikas (GS032). There is even a modern *mandra* that faces onto the main road through the modern village of Katydhata in the Solea valley, although the village is narrow enough for the goats to be taken to and from their pens through the back of the *mandra* without passing through the village. The separation at Kato Koutraphas *Mandres* (TS07) was distinct, but did not approach the extremes of the Rotson valley. Despite its name, Mandres was essentially an agricultural village and the shepherds' houses stood between it and the mountains, on the margin between the cultivated and the rougher land. Some 300 m of productive fields, and the transitional belt of threshing floors lay between the shepherds and the village centre, so that their difference was emphasised not only by separation, but also by the use to which the intervening space was put.

The exploitation of resources not only gives rise to the settlements of those that exploited it, but the professional communities which united them are also visible in the impact that they had upon the landscape. The impact is often considerable, although evidence of some activities survives better in the archaeological record than that of others. Slag heaps for example survive very well, as do the divisions of field boundaries and terracing. Rather less obvious to us now, due to the regenerative nature of the resource, are the results of grazing or forestry. When settlements are established for a specific purpose, such as the Roman farmsteads or those at the copper mines, the interaction between communities becomes more explicit. It is clear, for example, that a mining community would require charcoal

and food, but would be unable to produce them itself, and so needed to establish relations with communities that could. Specialist settlements such as *mandres* or farmsteads make profession-based communities even easier to see, but the gradual nucleation of settlement forms meant the integration of multiple specialised communities into a single living area with the result that some professions may be less obvious than others. That said, the co-existence of the more commonly encountered professions of farming and herding are clearly evident in the relative arrangements of dwelling structures, *mandres* and facilities such as threshing floors around settlements and in the landscape at large.

Coastal abandonment/Upland refuge

Between the Roman and medieval periods there was a marked shift in the settlement pattern as coastal sites were abandoned and inland villages established. The south of Akrotiri was clearly a busy area during the Hellenistic and Roman periods, and yet the only medieval occupation was at the monastery of Ayios Nikolaos and in Akrotiri village, both close to the salt lake and some 1500 m north of the majority of the identified Roman settlements (Last 1954). Similarly the settlement at Cape Drepanum was probably abandoned by the medieval period, and villages established along the ridge to the east. The Arab raids of the 7th century are the most frequently cited cause for this fundamental shift in settlement pattern that changed the face of Cyprus (Dikigoropoulos 1958; Kyrris 1996: 178-202), but there were other factors at work, which sometimes get less attention than they deserve. Settlements were undoubtedly destroyed during the Arab raids. Kalavassos *Kopetra*, for example, was severely damaged around 650 A.D. and abandoned soon afterwards (Rautman 2003: 10). It has been suggested, nevertheless, that the attacks did not entirely disrupt the normal round

of life (Cameron 1996: 32) and impressions of waves of Cypriots fleeing from burning villages may not be truly reflect the situation.

The two most obvious reactions to the threat of hostilities are flight and the preparation of defences. New, protective walls were built at many of the coastal cities in the mid-7th century in response to the first Arab raid (Balandier 2003: 267; Cameron 1996: 30). The cities represented considerable investments of time and money, and were too large and important to abandon lightly, yet not all of them had their defences renewed. Notable by its absence amongst the list of newly fortified centres is Kourion, which relied upon existing walls and its naturally defensible position, ‘but they were no match for the forces of Islam’ (Swiny 1982a: 91) and the site was abandoned in favour of Episkopi (Megaw 1993).

Kourion’s move to Episkopi happened at the same time as the dispersed rural settlements were being abandoned and is a clear sign of the changing settlement pattern in the area (Swiny and Mavromatis 2000: 449). Why the nucleated village was at Episkopi and not at Kourion is another matter. The new site is barely 1 km further inland and its position near the river would have been far more accessible to any raiding parties than the city on the ridge ever was, so added security does not seem to have been a primary reason for the move. It has been suggested that Episkopi was chosen for its reliable water source, something that Kourion never had, relying instead on supplies piped in from springs several kilometres to the north (Swiny 1982b; Young 1982: 154). Control of this water supply – the Kouris River – came to be of great importance to the medieval sugar industry, and was the cause of protracted conflict between Episkopi and Kolossi. Ayios

Yeorgios at Cape Drepanum may or may not have been abandoned for want of a water supply, but there are certainly plentiful wells and springs all along the ridge where the majority of medieval villages were established, when the coastal settlement was abandoned during the 7th century (Steel 2004: 108).

The later settlements in the Peyia area were some 9 km from the coast, which may have given raiders pause for thought, but there are accounts of the Arabs penetrating the island, even into the hills and mountains (Hill 1940: 293; Kyrris 1996: 176). There was no tradition of walled villages in Cyprus (Christodoulou 1959: 62) and it is possible that the rural population relied upon the benefits of high ground for their protection. Unable to defend their village, or to hide it they could simply use the extra time afforded to them by their vantage point to make an effective escape.

Whilst the movement to higher ground might be attributed to the Arab raids, the move inland did not always mean a gain in height. Episkopi is somewhat lower than Kourion, and the difference in elevation between the villages on the north of the Akrotiri peninsula and the deserted Roman settlements to the south is negligible, albeit they are considerably less exposed. Here perhaps the shift was prompted by changing approaches to land use (Swiny and Mavromatis 2000: 449). This seems to have been the case at Ayios Kononas, which was gradually abandoned during the 7th century and the land cultivated far less intensively by people living outside the immediate area (Fejfer and Hayes 1995: 68; Fejfer and Mathiesen 1995: 86).

Changes in practice of a different kind might also be responsible for the desertion of Ayios Yeorgios at Cape Drepanum, and the south of Akrotiri. If the majority of these communities had been concerned with the operation and servicing of the ports, any change in their fortunes would have an inevitable impact upon the settlements. The harbours would, naturally, have been particularly vulnerable during the period of the Arab raids and perhaps the risk of attack led to the concentration of maritime traffic into fewer, more easily defended harbours. Only two ports were of any real significance in the early medieval period, Famagusta and Larnaka, making it far easier for the state to control international trade (Aristidou 1995a: 265). It is possible that having once been forced into an extended period of idleness during the Byzantine period, the smaller harbours were then unable to re-establish themselves to compete with their larger rivals once the threat of raiding had diminished. It should be stressed, however, that the threat from the sea did not disappear (e.g. Kyrris 1996: 234), and coastal raiding continued into the medieval period, which may also account for the failure of small harbours to be rejuvenated.

It is worth remembering that there was also settlement shift between the Roman and medieval periods in the Rotson valley (Chapter 5) where the settlements were up to 20 km from the coast as the crow flies and in less immediate danger from raiding Arabs. Drury (1972: 167) suggests that valley bottoms were avoided because they became frost pockets in the winter, trapped heat in the summer and were prone to flooding when the river was in spate. All this may be true, but in the Rotson valley the survival of the small Roman settlements close to the river



Figure 7.3 Settlement in and around the Akrotiri survey area.

indicates that any flooding was not too destructive, no matter that it might have made occupation untenable. Significant flooding would have limited the apparent reuse of the structures to seasonal reoccupation, a practice that might also have

avoided the worst of the frosts and the heat. Villages built higher up the sides of valleys might have not only escaped the threat of flooding, but also have avoided the excesses of temperature fluctuation.

The move to high ground above the Rotson put the settlements within easy reach of communication routes in and out of the valley. A track runs along the river, but this limited any inhabitants to north/south travel. The medieval villages, on the other hand, were within easy reach of the north/south routes along the watershed, and far more conveniently situated for east/west travel to and from the valley. As settlements became nucleated the distances between many of them increased, necessitating longer journeys for anyone seeking to move from one to another and making it desirable for villages to be located on or close to these main communication routes. It may be that the upper routes in the Nikitari area did not develop until the medieval period when the settlements moved to the higher elevations, but many of the villages both in the Peyia and the Akrotiri area were established along routes that were certainly established during the Roman period, and possibly before that. At the other end of the scale it is probable that the coast road north from Cape Drepanum fell into disuse as the populations of Ayios Yeorgios and Ayios Kononas diminished and the settlements were finally deserted (Bekker-Nielsen 2004; Fejfer 1995).

It is clear there was considerable disruption between the Roman and medieval periods, and that there existed an atmosphere in which change was inevitable, but the Arab raids cannot be held entirely responsible for the shift in settlement patterns. It seems, rather, that they were at the time the most dominant of four elements that affect settlement location: the availability of water, the suitability

of the ground for agriculture, the desire for communication between communities and the need for physical security (Drury 1972: 169).

A second major change in settlement distribution is attributed to the arrival of the Turks in 1571. It was neither so large nor so momentous as the previous shift, and once again could be attributed to more than the invading forces. It has been suggested that the populace took to the hills and the mountains in 1571 and chose to stay there even after hostilities had ceased, leaving Turkish farmers to work the land on the plains (Gazioglu 1990: 74). Work in Greece, however, suggests that the flight and abandonment of lower ground under the Ottoman occupation of the 18th and 19th centuries has been overestimated (Frangakis and Wagstaff 1987; Frangakis-Syrett and Wagstaff 1992), and it seems as if the same might be true for Cyprus. The archaeological evidence is less clear than for the post-Roman shift, as there was no equivalent, permanent alteration to distribution patterns. Four of the nine vanished medieval villages in the three survey areas covered in this study could have disappeared when their inhabitants abandoned them for the safety of high ground; all were in the Peyia area, but none are particularly hopeful candidates (Chapter 6). In the 18th century Pococke (1998: 55) noted that much of the coastal land was uncultivated for fear of corsairs. Once more it would be wrong to dismiss this out of hand, but, firstly, the threat mentioned is not from the Ottomans and, secondly, the falling population up to the middle of the 18th century might simply have meant that less favourable, coastal land was not cultivated. Certainly the apparently empty landscape does not seem to have affected the island's production (Aristidou 1995b; Light 1998: 156; Turner 1998).

The invading Ottomans may simply have become a catchall term used by Cypriots and visitors, ancient and modern, to describe a threat from the outside, which encompassed the corsairs noted by Pococke as well as the bandits along the Solea valley who, according to local tradition, forced the villagers of Kalia to move their settlement higher up the valley side, away from the road. I do not know where the bandits came from: they may have landed at Morphou bay and raided inland from the coast. On the other hand they could have been Cypriot outlaws, of whom there was no shortage (Sant Cassia 1993), and whose activities against their own kind were conveniently disguised or ignored by attributing them to the Ottomans. It is worth considering our sources for the effects of both the Arab raids and the Ottoman invasion; historical and modern, they are almost entirely American, European or Greek and hence broadly Christian, particularly the historical sources. The arrival of the English, and later the Lusignans, in the 12th century is deemed to have had far less impact upon the island and its inhabitants than the raids of the Arabs and the invasion of the Turks; and 'arrival', 'raid' and 'invasion' are often the terms used. The majority of sources have seen western (Christian) intervention in Cyprus as a positive event, whilst the east has only brought destruction (and Islam).

I am certainly not the first person to question the reliability of sources, and cannot be the first person to announce that we should approach them with caution. It is worth reiterating, however, that as scholars working today we are reliant upon presentations and interpretations of the past, from the past, far more than we are upon our own, objective, untainted data. It should also be remembered that our data are, of course, neither objective nor untainted, no matter how hard we try, or how close we come to succeeding. Whenever we use a source we have

to be as aware as possible as the experience that went into creating it, from the nationality and background of the writer to the broader political climate in which they were working. We have to be aware of the layers of interpretation that comprise the basis of any study and, whilst not necessarily addressing them explicitly, make their presence clear to the reader, listener, viewer or audience of our work.

This chapter has covered three broad areas pertaining to changing patterns of settlement and community in Cyprus between the 4th and 19th centuries A.D. It is by no means an exhaustive study of the subject, but by considering this selection of topics I have also considered three large sections of the population and their affect on the shifting patterns. The influences of tax and land holding are important because they represent the governing power and its influence over the island and the greater population that, in fact, occupies the greater portion of the settlement on the island. The relationships between land use and settlement effectively focus on this greater population and its effects on the patterns of habitation. Finally, the consideration of the impact of the Arab raids and their role in the desertion of coastal settlements brings into play an external population, whose actions affect all strata of Cypriot society. This, of course, is a simplification and, just as it is impractical to dwell too long upon dividing up the concept of settlement into its constituent parts, or to separate settlement from community, so no section of the chapter can be solely devoted to one section of the population. In the following chapter I reunite the separate parts of the discussion to present a more general summary of human occupation, interaction and production in the landscape of Cyprus. In it I revisit some of the more important findings of my research, consider them in relation to the main points of

my research theory, and revisit the concept of experience and the level of phenomenology in my work.

8 Conclusions

From the outset of this study my intention was to investigate the changing nature of settlement in the Cypriot landscape, and identify manifestations of community. I gathered most of the data to address these issues during a field survey carried out in 2003. The very nature of survey means that I recorded evidence from all periods, but my interest lay in medieval and Ottoman Cyprus – post-Roman/pre-British – a somewhat neglected part of the island’s archaeology. In the final analysis very little of the recorded evidence was entirely left out of my discussion, no matter what period it came from. In the absence of clear Byzantine evidence, I included Late Roman data into my study in order to observe the whole arc of medieval settlement practices from beginning to end. On the other hand, I baulked at becoming too embroiled in the transition from Ottoman to British rule and did not delve far beyond the census results of 1881, although much of the surviving structural evidence in the landscape continued in use well into the 20th century.

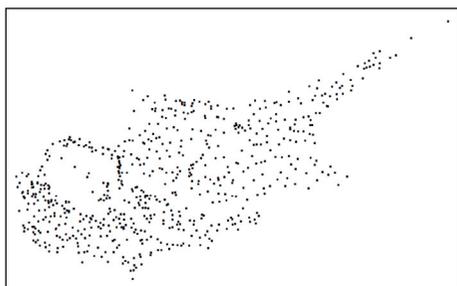


Figure 8.1 Modern villages in Cyprus

In this map each modern village in Cyprus is represented by a black dot. From it we can see the distribution of settlement across the island, but little more; there is no indication of villages’ population or ethnic foundation, for example, as there are on some other maps. I have deliberately not drawn the coastline; the combined dots give a

good approximation of the outline of Cyprus without it. It is even possible to discern one or two river valleys as linear concentrations of dots, and the more severe parts of the Troodos massif are indicated by the large areas free from dots. Human habitation is what makes the island interesting and one of the prime goals of landscape archaeology and settlement studies is to gain a broader picture of a settlement’s regional context. The dots on this map, which individually represent no more than a location, begin to reveal the political, economic, social and practical networks that make up Cyprus when viewed as a related whole. Landscape archaeologists consider settlements in a region in combination like this, rather than as isolated elements. I have endeavoured to take a step beyond the purely physical to consider the ‘imagined’ community or communities within my survey areas. Even if it is essential to plot the static distribution patterns of settlement to begin with, it is much more informative to move on to consider interactions within these distributions and between the people that inhabited them.

In order that I might move beyond the rather general view of modern settlement on Cyprus displayed by our island of dots I carried out my own systematic survey of settlement in the landscape in three very different areas of the island. In the process I confirmed many dots that already appeared on the maps, and added more of my own, but individual dots only indicate location, and settlement is much more than merely a location. It is more too than the collection of structures that we might see upon first encountering it. It is the culmination of a process that was influenced not only by its location in the landscape, but also by the size of its

population, the way in which they exploited the land, and their need to communicate with the inhabitants of other settlements. The prevailing laws of land tenure would also have had an input, as would the danger to the population of attack or oppression from within the island or from beyond its shores. Some of these factors were easier to identify in the landscape than others; there were those that did not appear at all and required recourse to historical sources, and still others that could really be no more than conjecture. Location was the first attribute of any settlement I noticed in the field; without a location there could be no settlement evidence. My evidence is in line with the generally held opinion that the dispersed pattern of farmsteads around cities and towns in the Roman period had, by the 12th century, given way to a more nucleated system of villages that shunned coastal sites. To the Roman pattern I was able to add small working units that were not concerned with agriculture; they were a similar size to the farmsteads, but were located in the mountains away from the fertile plains. Perhaps they have been ignored until now because they have not been identified, or perhaps because it is difficult to know what to call them without being sure what occupied their inhabitants. Even a broadly agricultural economy needed workers not directly involved in the production of crops to complement the farming communities, and these 'steads may have been *mandres* or lumber camps or the homes of charcoal burners.

The Roman cities and towns, the farmsteads and their non-agricultural counterparts were replaced by medieval villages, and the settlement pattern of today echoes those villages that went on to survive the depopulation of the later medieval and early Ottoman periods. The landscape has always been a dynamic entity and as the relative importance of political, practical, economic and social

influences waxed or waned so they were reflected in the form of individual settlements, their location and, therefore, their distribution across the island. The line of continuity may be clearest from the medieval period onward, but ancient settlements live on as part of the dynamic network, whether they lie unnoticed beneath a modern village, are preserved for public inspection like Kourion and Khirokitia for example, or have been abandoned like the small settlements in the Rotson valley, remaining part of the system just so long as someone remembers them or tells stories about them.

The human factor is always present in settlement. It may not be immediately evident by the time the archaeologist encounters it, but without human input settlement does not occur. With human presence comes community; any inhabited settlement is home to a community. In fact most settlements provide a focus for several overlapping and interlocking communities, and some communities can be said to occupy more than one settlement, either consecutively or concurrently. Imagined communities allow us to envision changing populations, social relations and interconnections within and between physical settlements in the landscape. Community is not directly evident in the field; as a sociological construct it has no material evidence of its own. It is possible, however, to discern communities by considering the human activity in a landscape in conjunction with the material evidence, historical documents and, where possible, additional information from local informants.

I was able to discern at least two professional or occupation-based communities, amongst the dispersed Roman settlements in and around the Nikitari area. Perhaps all the occupants of the small working units were also united in one

overarching community, but there is certainly reason to believe that there were smaller communities of farmers on the plains and foresters or shepherds in the mountains. In the Peyia area, the particular structure of *mandres* made the herders one of the easier communities to identify from the material evidence. That is, I was able to be sure that flocks had been kept at a certain place, and so that it was frequented by a member of the herding community, but it was not possible from this evidence to identify the actual extent of their operation or their relationships with other communities. If shepherds were identifiable from their structures, so the presence of farming communities were evident from the remains of field shelters, field walls and threshing floors, and ecclesiastical communities from the monasteries and churches in the landscape.

Communities based on other criteria such as gender or social standing, for example, were less clear in the material evidence than some of the professional communities, but their presence can nevertheless be inferred. Large towns like those on Akrotiri would inevitably have been home to social hierarchies made up of several strata of community in parallel with other, more evident, communities. Monasteries may seem the most likely settlements to house single gender communities, but they were not necessarily closed institutions. *Kykko*, for example, became a large commercial operation during the Ottoman period, which would have involved interaction with outside communities. In addition, a considerable drawback for those that did strive for the eremitic lifestyle was that reports of their sanctity often attracted so many adherents that their goals were unachievable. These less obvious communities are far more rigid than those based on profession or livelihood and inclusion in more than one is unlikely; social mobility may have been possible, but gender mobility was far less likely.

Ultimately all communities must be closely associated with their surroundings, the space in which they operate; whatever differences they may all have, all communities exist within the landscape, and by their occupation of it they change it. This is a vital element of the reciprocal, dynamic relationship between the two, so that as communities change the landscape in which they exist, so the changing background against which they act affects their actions and reactions to it.

These impressions of settlement and community developed in no small measure during my interpretation and analysis of a dataset dominated by primary data that I gathered in the field. My project was no different from most archaeological projects; it was specifically tailored to answer a set of research questions using the available resources. In this case the project was designed to address manifestations of settlement and community in the Cypriot landscape. Given that the resources available necessitated a mono-survey my primary data are inevitably of a different calibre to those collected by a large-scale, interdisciplinary survey project or excavation, with its large teams of fieldworkers and specialists. The data and analysis resulting from it, however, are just as valid; differing methods and resources are one of the most important aspects any reader takes when approaching the results of a project, or comparing them to the results of another.

One of the great advantages of working with others is the opportunity to discuss your work, your surroundings, your feelings and impressions or doubts as you go. Within a group of archaeologists there will almost certainly be a sufficiently diverse selection of ideas or points of view to promote lively debate. For the lone worker this banter, be it idle, constructive or downright revolutionary is not

available. I did carry on dialogues with myself, which helped me to solve problems, work through difficulties or simply let off steam. Sometimes this was no more than me talking to myself, or to trees or goats or the landscape in general. At other times the dialogue took place in the notebook, sometimes over several days, as a particular problem worked its way through my brain. Whilst the content of the notebooks is not always particularly relevant to this thesis these are the most useful dialogues as, once written down, they cease to be aberrant behaviour and become a record of my experience in the field.

It was important for me to include elements of my experience in the field in my final report. I decided against imaginative reconstructions of a life in the landscape, or quotes from the oft-referred to notebooks, not because there is anything necessarily wrong with them, but because they were not right for my project. Many notebook entries would have required rewriting for them to be intelligible to anyone but me, which would defeat the object of including them as examples of my experience, and the fiction that occurred to me whilst I was in the field was seldom relevant or appropriate. I opted instead to use the experience that accumulated during my fieldwork to elevate description and discussion in the thesis above a flat summary of data, and to endeavour to present a fuller picture of my work and the landscape I encountered as a result.

My experience was unique, broad ranging and personal, and could only have resulted from the unique, broad-ranging mono-survey that I carried out in 2003. As an archaeologist working in the 21st century I could not hope to recreate the experience of anyone, of whatever period, living and working in the landscape of my survey areas. They were inhabited very differently in the past; today the

settlement pattern in the Akrotiri area may resemble the post-Roman distribution, but no one lives in the Rotson valley in the Nikitari area, and few people work there. The Peyia area is similarly, although not so completely, abandoned and I could not meet members of the once sizeable populations that used to occupy all three areas as they went about their work or travelled through the landscape. I even moved through the landscape differently to past inhabitants; long distance travel was by car, albeit often along some of the less frequently used, older roads, and much of my small-scale movement through it on foot, no matter how comprehensive, was limited within the grid squares. Whilst I was, perhaps, closer to the landscape when I was on foot, the systematic regime of 50 m passes ensured that I seldom approached it in the most obvious, economic or established manner.

The process of looking at the landscape might reasonably be expected to lead me toward the experiences of past inhabitants, but for the most part development and modern land use prevented me from even beginning to share views that the previous occupants might have had from their homes or from the paths as they passed through the landscape. The Rotson valley is now covered in pine trees far denser than it has been at any time since humans began living and working in the area. The situation was similar in the Peyia area, although the forest is not managed to the same extent, and much of Akrotiri is now covered in citrus and eucalyptus plantations, and the RAF base that makes it the area worst affected by construction.

As a novice GIS user I had planned to study the landscape through viewshed analyses, but my experience in the field persuaded me otherwise. Traditional

viewshed analyses that consider a static landscape from a single point are limiting; they offer an interpretation of a landscape that does not exist, even if the possibility of the two-way view along a line of sight is taken into account (Wheatley and Gillings 2002). Even those analyses that now apply a ‘fuzziness’ to the data to incorporate some level of perception or movement into their viewsheds cannot recreate the experience of a landscape (Bell and Lock 2000; Tschan *et al.* 2000; Wheatley and Gillings 2000; Witcher 1999). Individuals move about, often within a familiar territory, and their view of the landscape is extended by their knowledge of what lies beyond and behind. As I noted earlier a settlement is more than a dot on a map, and as the occupants of a settlement, even a small farmstead, moved about it they would be presented with multiple views of the landscape that surrounded them.

Having established the multiple views of a static landscape from a changing point of view it is worth mentioning the multiple views offered by a changing landscape. Ignoring long term changes such as building work or reforestation, and leaving aside seasonal changes of tree cover and crops, we are still left with everyday changes that will affect any single view of the landscape (Brassley 1999). The position of the sun in the sky can conceal or reveal different parts of topographical relief, whilst heavy rain or cloud may affect the distance to which the landscape can be seen. On a smaller scale people and animals move in and out of the field of view extending the image by the knowledge that they must have come from or gone to somewhere else in the landscape. And rising smoke may further enrich the picture by revealing an otherwise hidden settlement or working area. This assumes a silent landscape, but the animals and the people make noise as they work or talk or move, which may add them to an observer’s

experience without them ever being seen. Similarly the smells of smoke or animals or cut timber may reveal an otherwise unseen activity.

All this takes us far beyond the realm of GIS, toward the realm of phenomenology in fact, and serves to illustrate some of the difficulties faced when endeavouring to commit the depth of any experience in a three dimensional world to the flatland of words and pictures on the page (Abbot 1992; Tufte 1990: 12-35). The experience of living in a landscape, of learning its subtleties and coming to know its other inhabitants glues the community together far more strongly than being able to see your neighbours or the ridgeline that marks the edge of your valley.

The past is gone and to experience it is impossible. This somewhat gloomy assertion is essentially true; even the increased openness to intuitive understanding engendered by a phenomenological approach can do little about the gulf of time between our subject and our observation of it. Simply standing in the same place and seeing the same landscape as someone in the past, which in itself is unlikely, does not constitute sharing their experience of it (Smith 2003: 65). That said, it can only be to the good to use our experiences to add facets to our understanding of a subject. Both Heidegger and Merleau-Ponty asserted that the human body is the privileged vantage point through which the world is viewed (Tilley 1994: 13-14). It is also an inevitable vantage point; no matter how hard we may try we can only see the world through our own body, and any such perception is filtered by all the experiences of our life up to that moment. To this extent all archaeologists have a phenomenological view of their subject, but only

some embrace and utilise it whilst others, with a preference for hard, immutable fact, repress it severely.

My approach to this project was not intentionally phenomenological; I set out into the field with ideals of systematic recording, which I achieved, but because I was open to the possibility of experience, much of which I recorded, I was able at a later stage to imbue my objective data with a more subjective air. The contents of my notebooks were eclectic and generally written in the present tense as I described what I could see or what I thought at the time. They are the real record of my experience of the landscape. On the other hand the reports and discussion presented in Chapters 4, 5, and 6 take the data and filter the experience to present a combined, past tense archaeological view of the landscape as I perceived it. My experience did not replace my quantitative recording, but enhanced it making the body of primary that I collected a valuable, adaptable and extensive record with which to approach the existing opinions regarding settlement in Cyprus and add my voice to the discussion.

What is clear from this research is that with a specifically tailored project it is possible for mono-survey to produce wide-ranging and comprehensive results that can address issues pertaining to regional economic patterns, shifts in the physical distribution of settlements, and more localised questions concerning preferred locations for settlement, or land use and the exploitation of natural resources. By combining elements of a more experiential approach with strict quantitative recording it has been possible to address not only material questions of settlement in the landscape, but also social relationships of power and dependence amongst the communities who occupied the landscapes.

This thesis is a faithful representation of my time in the landscape and my reactions to what I found there, but much of the moment-by-moment experience has been removed; the background noise has been filtered out to avoid distorting the main theme. One thing in particular is missing – the smell. Every time I open my scuffed and tattered notebooks the smell of sweat and dust rises from the pages; it makes the recreation of my experience all the more vivid, and sharing it in such a direct manner all the less advisable.

Bibliography

- Abbot, E.A.
1992 *Flatland: A Romance of Many Dimensions*. First Published 1884 under the nom de plume A. Square. New York: Dover Publications Inc.
- Adovasio, J.M., G.F. Fry, J.D. Gunn, and R.F. Maslowski
1975 Prehistoric and Historic Settlement Patterns in Western Cyprus (With a Discussion of Cypriot Neolithic Stone Tool Technology). *World Archaeology* 6 (3): 339-364.
- 1978 Settlement Patterns in Western Cyprus. *Report of the Department of Antiquities, Cyprus*: 39-57.
- Alcock, S.E.
1993 *Graecia Capta: The Landscapes of Roman Greece*. Cambridge: Cambridge University Press.
- Alcock, S. E. and J. F. Cherry (eds)
2004 *Side-by-Side Survey: Comparative Regional Studies in the Mediterranean World*. Oxford: Oxbow Books.
- Ammianus Marcellinus
1982 Book XIV.8, 14. In *Rerum Gestarum. Volume I. With English Translation by John C. Rolfe*. London: William Heinemann Ltd.
- Anderson, B.
1991 *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso.
- Andrews, G., J.C. Barrett, and J.S.C. Lewis
2000 Interpretation Not Record: The Practice Of Archaeology. *Antiquity* 74: 525-530.
- Anschuetz, K.F., R.H. Wilshusen, and C.L. Scheick
2001 An Archaeology of Landscapes: Perspectives and Directions. *Journal of Archaeological Research* 9: 157-207.
- Aristidou, E.
1995a Trade and Port Development in Cyprus During the Latin Period. In Karageorghis, V. and D. Michaelides (eds.), *Cyprus and the Sea: Proceedings of the International Symposium, Nicosia 25-26 September 1993*. 263-270. Nicosia: University of Cyprus.
- 1995b Trade and Port Development in Cyprus During Turkish Occupation (1571-1878). In Karageorghis, V. and D. Michaelides (eds.), *Cyprus and the Sea: Proceedings of the International Symposium, Nicosia 25-26 September 1993*. 271-278. Nicosia: University of Cyprus.
- Aupert, P.
1996 *Guide d'Amathonte. Sites et Monuments XV*. Athens: Ecole Francais d'Athenes, Fondation A.G. Leventis.
- B.S.I.
1990 *British Standard Recommendations for the Presentation of Theses and Dissertations, BS4821: 1990*. London: British Standards Institution.

- Baird, D.
1984 Appendix II. Survey in the Dhrousha Area of Western Cyprus. In Edgar J. Peltenburg, Lemba Archaeological Project, Cyprus, 1982, Preliminary Report. *Levant* 16: 55-65.
- Balandier, C.
2000 The Defensive Organisation of Cyprus at the Time of the City-Kingdoms (8th Century B.C. to the End of the 4th Century B.C.). *Report of the Department of Antiquities, Cyprus*: 169-184.
2003 The Defensive Works of Cyprus During the Late Antiquity and Early Byzantine Periods (4th-7th Century A.D.). *Report of the Department of Antiquities, Cyprus*: 261-273.
- Barker, G.
1995 *A Mediterranean Valley: Landscape Archaeology and Annales History in The Biferno Valley*. London: Leicester University Press.
1996 *Farming The Desert: The UNESCO Libyan Valleys Archaeological Survey, Volume One: Synthesis*. Paris: UNESCO Publishing.
- Barker, G.W., R. Adams, O.H. Creighton, D. Crook, D.D. Gilbertson, J.P. Grattan, C.O. Hunt, D.J. Mattingly, S.J. McLaren, H.A. Mohammed, P. Newson, C. Palmer, F.B. Pyatt, T.E.G. Reynolds, and R. Tomber
1999 Environment and Land Use in the Wadi Faynan, Southern Jordan: The Third Season of Geoarchaeology and Landscape Archaeology (1998). *Levant* 31: 255-292.
- Bekker-Nielsen, T.
1995 The Road Network. In Fejfer, J. (ed.), *Ancient Akamas I: Settlement and Environment*. 87-132. Aarhus: Aarhus University Press.
- 2004 *The Roads of Ancient Cyprus*. Copenhagen: Museum Tusculanum Press, University of Copenhagen.
- Bell, T. and G. Lock
2000 Topographic and Cultural Influences on Walking the Ridgeway in Later Prehistoric Times. In Lock, G. (ed.), *Beyond the Map: Archaeology and Spatial Technologies*. 85-100. Oxford: IOS Press.
- Bender, B., S. Hamilton, and C. Tilley
1997 Leskernick: Stone Worlds; Alternative Narratives; Nested Landscapes. *Proceedings of the Prehistoric Society* 63: 147-178.
- Benson, J.L.
1969 Bamboula at Kourion, The Stratification of the Settlement. *Report of the Department of Antiquities, Cyprus*: 1-28.
1970 Bamboula at Kourion, The Stratification of the Settlement. *Report of the Department of Antiquities, Cyprus*: 25-74.
- Bintliff, J., P. Howard, and A. Snodgrass
1999 The Hidden Landscapes of Prehistoric Greece. *Journal of Mediterranean Archaeology* 12 (2): 139-168.
- Blouet, B.W.
1972 Factors Influencing the Evolution of Settlement Patterns. In Ucko, P.J., R. Tringham, and G.W. Dimbleby (eds.), *Man, Settlement and Urbanism: Proceedings of a Meeting of the Research Seminar in Archaeology and Related Subjects Held at the Institute of Archaeology, London University*. 3-15. London: Duckworth.

- Blue, L.K.
1997 Cyprus and Cilicia: The Typology and Palaeogeography of Second Millenium Harbors. In Swiny, S., R.L. Hohlfelder, and H.W. Swiny (eds.), *Res Maritimae: Cyprus and the Eastern Mediterranean From Prehistory to Late Antiquity. Proceedings of the 2nd International Symposium 'Cities on the Sea,' Nicosia, Cyprus, October 18-22, 1994.* American Schools of Oriental Research Archaeological Reports 4; Cyprus American Archaeological Research Institute Monograph Series, Volume 1. 31-43. Atlanta, Georgia: Scholars Press.
- Bolger, D.
1988 *Erimi-Pamboula: A Chalcolithic Settlement in Cyprus.* British Archaeological Reports, International Series 443. Oxford: B.A.R.
- Bolger, D., C. McCartney, and E. Peltenburg
2004 Regional Interaction in the Prehistoric West: Lemba Archaeological Project Western Cyprus Survey. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000.* British School at Athens Studies 11, 105-123. London: British School at Athens.
- Brassley, P.
1999 Agricultural Technology and the Ephemeral Landscape. In Nye, D.E. (ed.), *Technologies of Landscape: From Reaping to Recycling.* 21-39. Amherst: University of Massachusetts Press.
- Breton Connelly, J.
n.d. *Yeronisos Island Expedition.*
<http://www.nyu.edu/projects/yeronisos/yer1A.html> Last accessed 4 December 2004.
- 2002 Excavations of Geronisos (1990-1997): First Report. *Report of the Department of Antiquities, Cyprus:* 245-268.
- Brigitte-Porée, P.
1995 Les Moulins et Fabriques à Sucre De Palestine et de Chypre: Histoire, Géographie et Technologie d'une Production Croisée et Médiévale. In Coureas, N. and J. Riley-Smith (eds.), *Cyprus and the Crusades: Papers Given at the International Conference 'Cyprus and the Crusades,' in Nicosia 6-9 September, 1994.* 377-461. Nicosia: Cyprus Research Centre.
- Brophy, K.
1998 This Is Not Phenomenology (or Is It?): Experiencing Cursus Monuments. *3rd Stone* 30: 7-9.
- 2001 A Void: A Biography of Phenomenology in Archaeology.
- Bruce, J.L.
1937 Appendix V: Antiquities in the Mines of Cyprus. In Gjerstad, E., J. Lindros, E. Sjöqvist, and A. Westholm (eds.), *The Swedish Cyprus Expedition: Finds and Results of the Excavation in Cyprus 1927-1931. Volume III - Text.* 639-671. Stockholm: The Swedish Cyprus Expedition.
- Brück, J.
1998 In the Footsteps of the Ancestors: a Review of Christopher Tilley's A Phenomenology of Landscape: Places, Paths and Monuments. *Archaeological Review from Cambridge* 15 (1): 23-36.
- Buitron, D.
1979 The Archaic Precinct at the Sanctuary of Apollo Hylates, Kourion. *Report of the Department of Antiquities, Cyprus:* 316-320.

- 1981 The Circular Rubble Table in the Archaic Precinct at Kourion. *Report of the Department of Antiquities, Cyprus*: 157-159.
- Buitron-Oliver, D.
1997 Kourion: The Evidence for the Kingdom of the 11th to the 6th Century B.C. *Bulletin of the American Schools of Oriental Research* 308: 27-36.
- Burton, N.
1998 Narrative of a Voyage From Liverpool to Alexandria ... in the Years 1836-1837. First Published in 1838. In Martin, D.W. (ed.), *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5*. 209-215. Altamont, New York: Greece and Cyprus Research Center, Inc.
- Buzan, T. and B. Buzan
2003 *The Mind Map Book*. London: BBC.
- Cadogan, G.
2004 Hector Catling and the Genesis of the Cyprus Survey. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 17-22. London: British School at Athens.
- Cameron, A.
1996 Cyprus at the Time of the Arab Conquests. In Cameron, A. (ed.), *Changing Cultures in Early Byzantium*. 27-49. Aldershot: Variorum.
- Canuto, M.A. and J. Yaeger (eds)
2000 *The Archaeology of Communities: A New World Perspective*. London: Routledge.
- Carpenter, J.R.
1982 Episkopi *Phaneromeni*: Bronze Age Settlement and Cemetery. In Swiny, H.W. (ed.), *An Archaeological Guide to the Ancient Kourion Area and the Akrotiri Peninsula*. 29-37. Nicosia: Department of Antiquities.
- Catling, H.W.
1962 Patterns of Settlement in Bronze Age Cyprus. *Opuscula Atheniensia* IV: 129-169.
- Cavanagh, W.G.
2004 WYSIWYG: Settlement and Territoriality in Southern Greece During the Early and Middle Neolithic Periods. *Journal of Mediterranean Archaeology* 17 (2): 165-189.
- Chapman, R.
1981 The Emergence of Formal Disposal Areas and the 'Problem' of Megalithic Tombs in Prehistoric Europe. In Chapman, R., I. Kinnes, and K. Randsborg (eds.), *The Archaeology of Death*. 71-81. Cambridge: Cambridge University Press.
- Cherry, J.F.
1979 Four Problems in Cycladic Prehistory. In Davis, J.L. and J.F. Cherry (eds.), *Papers in Cycladic Prehistory. Monograph 14*. 22-47. Los Angeles: UCLA Institute of Archaeology.
- 1982 A Preliminary Definition of Site Distribution on Melos. In Renfrew, C. and W. Wagstaff (eds.), *An Island Polity: The Archaeology of Exploitation in Melos*. 10-23. Cambridge: Cambridge University Press.

- Cherry, J.F., J.L. Davis, and E. Mantzourani
 1991 *Landscape Archaeology As Long-Term History: Northern Keos in the Cycladic Islands From Earliest Settlement Until Modern Times. Monumenta Archaeologica 16.* Los Angeles: UCLA Institute of Archaeology.
- Christodoulou, D.
 1959 *The Evolution of the Rural Land Use Pattern in Cyprus. World Land Use Survey, Monograph 2: Cyprus.* Berkhamsted: Geographical Publications Ltd.
- Christou, D.
 1992 Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1991. *Bulletin de Correspondance Hellénique* 116: 793-831.
 1993 Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1992. *Bulletin de Correspondance Hellénique* 117: 719-755.
 1997 Appendix: Some Brief Thoughts on the Ancient Harbour of Kourion. In Swiny, S., R.L. Hohlfelder, and H.W. Swiny (eds.), *Res Maritimae: Cyprus and the Eastern Mediterranean From Prehistory to Late Antiquity. Proceedings of the 2nd International Symposium 'Cities on the Sea,' Nicosia, Cyprus, October 18-22, 1994.* American Schools of Oriental Research Archaeological Reports 4; Cyprus American Archaeological Research Institute Monograph Series, Volume 1. 371-372. Atlanta, Georgia: Scholars Press.
- Clarke, E.D.
 1998 Travels in Various Countries of Europe, Asia and Africa. Commencing January 1, 1801. First Published 1813. In Martin, D.W. (ed.), *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5.* 121-134. Altamont, New York: Greece and Cyprus Research Center, Inc.
- Cloke, P.
 1979 *Key Settlements in Rural Areas.* London: Methuen.
- Cobham, C.D.
 1908 *Excerpta Cypria: Materials for a History of Cyprus.* Cambridge: Cambridge University Press.
- Coccia, S. and D. Mattingly
 1992 Settlement History, Environment and Human Exploitation of an Intermontane Basin in the Central Appenines: The Rieti Survey 1988-1991, Part I. *Papers of the British School at Rome* 60: 213-289.
- Cohen, A.P.
 1985 *The Symbolic Construction of Community.* Chichester: Ellis Horwood.
- Daniel, J.F.
 1938 Excavations at Kourion: The Late Bronze Age Settlement - Provisional Report. *American Journal of Archaeology* 42: 261-275.
- Darvill, T.
 1997 Landscapes and the Archaeologist. In Barker, K. and T. Darvill (eds.), *Making English Landscapes: Changing Perspectives.* Bournemouth University, School of Conservation Sciences, Occasional Papers 3. Oxbow Monograph 93, 70-91. Oxford: Oxbow.
- Davis, J.L., S.E. Alcock, J. Bennet, Y.G. Lolos, and C.W. Shelmerdine
 1997 The Pylos Regional Archaeological Project Part I: Overview and The Archaeological Survey. *Hesperia* 66 (3): 391-494.

de Lusignan, S.

- 2001 *Lusignan's Chorography and Brief General History of the Island of Cyprus (A.D. 1573)*. Sources for the History of Cyprus, vol. 10. Translated by O. Pelosi. Albany: University at Albany, State University of New York.

der Parthog, G.

- 1994 *Byzantine and Medieval Cyprus: A Guide to the Monuments*. New Barnet: Interworld Publications.

Dever, W.G.

- 1985 Village Planning at Be'Er Resism and Socio-Economic Structure in Early Bronze Age IV Palestine. In Mazar, B. and Y. Yadin (eds.), *Eretz-Israel: Archaeological, Historical and Geographical Studies Volume 18*. 18-28. Jerusalem: The Israel Exploration Society in cooperation with the Institute of Archaeology, The Hebrew University.

Dewar, R. and K.A. McBride

- 1992 Remnant Settlement Patterns. In Rossignol, J. and L. Wandsnider (eds.), *Space, Time, and Archaeological Landscapes*. 227-255. New York and London: Plenum Press.

di Cesnola, L.P.

- 1877 *Cyprus, Its Ancient Cities, Tombs and Temples*. London: John Murray.

Diamantis, A.

- 1994 *Adamantios Diamantis: State Gallery of Contemporary Cypriot Art, 7th February to 31 March 1994*. (Αδαμαντιος Διαμαντησ. Κρατικη Πινακοθηκη Συγχρονησ Κυπριακησ Τεχνησ. 7 Φεβρουαριου – 31 Μαρτιου 1994). Cultural Services of the Ministry of Education and Culture (Πολιτιστικεσ Υπηρεσιεσ Υπουργειου Παιδειασ και Πολιτισμου).

Dikigoropoulos, A.I.

- 1958 The Political Status of Cyprus A.D. 648-965. *Report of the Department of Antiquities, Cyprus 1940-1948*.
- 1978 Agrarian Conditions and the Demography of Cyprus During the Period of the Arab Wars, AD 648-965. *Geographical Chronicles (Cyprus)* 3 (13): 3-14.

Douglass, W.A.

- 1998 The Mining Camp As Community. In Knapp, A.B., V.C. Pigott, and E. Herbert (eds.), *Social Approaches to an Industrial Past: The Archaeology and Anthropology of Mining*. 97-108. London: Routledge.

Drury, M.D.

- 1972 Cyprus: Ethnic Dualism. In Clarke, J.I. and W.B. Fisher (eds.), *Populations of the Middle East and North Africa: A Geographical Approach*. 161-181. London: University of London.

Durrell, L.

- 1957 *Bitter Lemons of Cyprus*. London: Faber and Faber Limited.

Ellis Burnet, J.

- 1997 Sowing the Four Winds: Targeting the Cypriot Forest Resource in Antiquity. In Swiny, S., R.L. Hohlfelder, and H.W. Swiny (eds.), *Res Maritimae: Cyprus and the Eastern Mediterranean From Prehistory to Late Antiquity. Proceedings of the 2nd International Symposium 'Cities on the Sea,' Nicosia, Cyprus, October 18-22, 1994*. American Schools of Oriental Research Archaeological Reports 4; Cyprus American Archaeological Research Institute Monograph Series, Volume 1. 59-69. Atlanta, Georgia: Scholars Press.
- 2004 *Forest Bioresource Utilisation in the Eastern Mediterranean Since Antiquity: A Case Study of the Makheras*. Oxford: B.A.R.

- Enlart, C.
1987 *Gothic Art and the Renaissance in Cyprus (Originally Published 1899. This Edition Edited and Translated by David Hunt)*. London: Trigraph.
- Fejfer, J. (ed.)
1995 *Ancient Akamas I: Settlement and Environment*. Aarhus: Aarhus University Press.
- Fejfer, J. and P.P. Hayes
1995 Ancient Akamas and the Abandonment of Sites in 7th Century A.D. Cyprus. In Wallace, P.W. (ed.), *'Visitors, Immigrants and Invaders in Cyprus' Conference Report*. 62-69. Albany: Institute of Cypriot Studies, University at Albany, State University of New York.
- Fejfer, J. and H.E. Mathiesen
1995 The Site of Ayios Kononas. In Fejfer, J. (ed.), *Ancient Akamas I: Settlement and Environment*. 73-86. Aarhus: Aarhus University Press.
- Fortin, M.M.
1978 The Fortification Wall at Lara. *Report of the Department of Antiquities, Cyprus*: 58-67.
- Frangakis, E. and M. Wagstaff
1987 Settlement Pattern Change in the Morea (Peloponnisos) C. AD 1700-1830. *Byzantine and Modern Greek Studies* 11: 163-192.
- Frangakis-Syrett, E. and J.M. Wagstaff
1992 The Height Zonation of Population in the Morea C.1830. *Annual of the British School at Athens* 87: 439-446.
- Frankel, D. and J.M. Webb
1999 Three Faces of Identity: Ethnicity, Community and Status in the Cypriot Bronze Age. *Mediterranean Archaeology* 11: 1-12.
- Gaudry, A.
1855. *Recherches Scientifiques en Orient Entreprises par les Ordres du Gouvernement, Pendant les Années 1853-1854. Partie Agricole*. Paris: Imprimerie Impériale.
- Gazioglu, A.C.
1990 *The Turks in Cyprus: A Province of the Ottoman Empire (1571-1878)*. London: Rüstem and Brother.
- Geertz, H.
1980 The View From Within. In *Architecture As Symbolism and Self-Identity: Proceedings of Seminar 4 in the Series Architectural Transformations in the Islamic World Held in Fez, Morocco, October 9-12, 1979*. 63-73. Philadelphia: The Aga Khan Award for Architecture.
- Gerritsen, F.
2004 Archaeological Perspectives on Local Communities. In Bintliff, J. (ed.), *A Companion to Archaeology*. 141-154. Oxford: Blackwell.
- Giagrande, C.
1987 Cyprus Underwater Survey, 1983-1984. A Preliminary Report. *Report of the Department of Antiquities, Cyprus*: 185-197.
- Gibraltar, H., V. Seymer, W.H. Buckler, and G. Buckler
1933 The Church of Asinou, Cyprus and Its Frescoes. *Archaeologia* 83: 327-350.
- Gibson, E.
2005 *Negotiating Space: Routes of Communication in Roman to British Colonial Cyprus*. Unpublished Ph.D. Thesis submitted to the University of Glasgow.

- Given, M.
2000 Agriculture, Settlement and Landscape in Ottoman Cyprus. *Levant* 32: 215-236.
- 2001 *Troodos Archaeological and Environmental Survey Project Web Site*. <http://www.taesp.arts.gla.ac.uk> Last accessed 12 April 2005.
- 2002a Maps, Fields and Boundary Cairns: Demarcation and Resistance in Colonial Cyprus. *International Journal of Historical Archaeology* 6 (1): 1-22.
- 2002b Troodos Archaeological and Environmental Survey Project: Report on the Third Season, July-August 2002.
- 2003a *Troodos Archaeological and Environmental Survey Project: Report on the Fifth Season, November 2003*. Troodos Archaeological and Environmental Survey Project. <http://www.taesp.arts.gla.ac.uk/Reports/2003/TAESPNov2003Lite.pdf> Last accessed 10 November 2004.
- 2003b *Troodos Archaeological and Environmental Survey Project: Report on the Fourth Season, July-August 2003*. Troodos Archaeological and Environmental Survey Project. <http://www.taesp.arts.gla.ac.uk/Reports/2003/TAESP2003.pdf> Last accessed 10 November 2004.
- 2004 *The Archaeology of the Colonized*. London: Routledge.
- Given, M., V. Kassianidou, A.B. Knapp, and J. Noller
2002 Troodos Archaeological and Environmental Survey Project, Cyprus: Report on the 2001 Season. *Levant* 34: 25-38.
- Given, M. and A.B. Knapp
2003 *The Sydney Cyprus Survey Project: Social Approaches to Regional Archaeological Survey. Monumenta Archaeologica 21*. Los Angeles: Cotsen Institute of Archaeology, University of California.
- Given, M., A.B. Knapp, I. Evans, E. Gibson, T. Ireland, V. Kassianidou, J. Noller, H. Saunders, L. Sollars, N. Urwin, K. Winther Jacobsen, and S. Zesimou
2001 Troodos Archaeological and Environmental Survey Project: First Preliminary Report (June-July 2000). *Report of the Department of Antiquities, Cyprus* 2001: 425-440.
- Given, M., A.B. Knapp, N. Meyer, T.E. Gregory, V. Kassianidou, J. Noller, L. Wells, N. Urwin, and H. Wright
1999 The Sydney Cyprus Survey Project: An Interdisciplinary Investigation of Long-Term Change in the North Central Troodos, Cyprus. *Journal of Field Archaeology* 26 (1): 19-39.
- Goodwin, J.C.
1984 *An Historical Toponymy of Cyprus -- Fourth Edition. 2 Volumes*. Pano Lakatamia, Cyprus: Jack C. Goodwin.
- Graham, A., P. Barry, V. Kassianidou, K. Winther Jacobsen, and A. Boutin
2001 *TS02: Roman Smelting and Settlement at Xyliatos Mavrovouni*. Troodos Archaeological and Environmental Survey Project - Field Reports 2001. <http://www.taesp.arts.gla.ac.uk/Landscape/SIA/TS02.htm> Last accessed 22 March 2003.
- Gregory, T.E.
1993 Byzantine and Medieval Pottery. In Sørensen, L.W. and D.W. Rupp (eds.), *The Land of The Paphian Aphrodite, Volume 2. The Canadian Palaipaphos Survey Project: Artifact and Ecofactual Studies*. 157-176. Göteborg: Paul Åström's Förlag.

- 2003 The Byzantine Problem. In Given, M. and A.B. Knapp (eds.), *The Sydney Cyprus Survey Project: Social Approaches to Regional Archaeological Survey. Monumenta Archaeologica 21*. 283-284. Los Angeles: The Cotsen Institute of Archaeology, University of California.
- Grivaud, G.
1998 *Villages Désertés À Chypre (Fin XIIe - Fin XIXe Siècle)*. Meletai kai Ipommimata. Volume 3. Nicosia: Archbishop Makarios III Foundation.
- Grüsser, O.-J. and T. Landis
1991 *Visual Agnosias and Other Disturbances of Visual Perception and Cognition*. Visual and Visual Dysfunction Volume 12. London: The Macmillan Press Ltd.
- Gunnis, R.
1936 *Historic Cyprus: A Guide to Its Towns and Villages, Monasteries and Castles*. London: K. Rustem and Bro.
- Hadjichristodoulou, C. and D. Marianthefs
2002 *The Church of Our Lady of Asinou*. Nicosia: The Bank of Cyprus Cultural Foundation and The Holy Bishopric of Morphou.
- Hadjisavvas, S.
1977 The Archaeological Survey of Paphos: A Preliminary Report. *Report of the Department of Antiquities, Cyprus 1977*: 222-231.
1992 *Olive Oil Processing in Cyprus From the Bronze Age to the Byzantine Period*. *Studies in Mediterranean Archaeology, Volume XCIX*. Nicosia: Paul Åströms Förlag.
- 1993 Perforated Monoliths: Myths and Realities. In Amouretti, M.-C. and J.-P. Brun (eds.), *La Production du Vin et de l'Huile en Méditerranée. Oil and Wine Production in the Mediterranean Area. Bulletin de Correspondance Hellénique. Supplement XXVI*. 137-149. Athens: École Française d'Athènes.
- Hadjisavvas, S.
2004 Surveying After Catling: the Work of the Department of Antiquities Survey Branch Since 1960. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 37-41. London: British School at Athens.
- Hall, T.
1989 *Urban Geography*. London: Routledge.
- Halstead, P.
1994 The North-South Divide: Regional Paths to Complexity in Prehistoric Greece. In Mathers, C. and S. Stoddart (eds.), *Development and Decline in the Mediterranean Bronze Age*. 195-217. Sheffield: Sheffield University (Department of Archaeology and Prehistory).
- Hamilton, S.
1999 Lost in Translation? A Comment on the Excavation Report. *Papers From The Institute of Archaeology* 10: 1-8.
- Herzog, Z.
1997 *Archaeology of the City: Urban Planning in Ancient Israel and Its Social Implications*. Tel Aviv: Emery and Claire Yass Archaeology Press.

Heywood, H.C.

- 1982 The Archaeological Remains of the Akrotiri Peninsula. In Swiny, H.W. (ed.), *An Archaeological Guide to the Ancient Kourion Area and the Akrotiri Peninsula*. 162-175. Nicosia: Department of Antiquities, Cyprus.

Heywood, H., S. Swiny, D. Whittingham, and P. Croft

- 1981 Erimi Revisited. *Report of the Department of Antiquities, Cyprus*: 24-42.

Hill, G.

- 1940 *A History of Cyprus. Volume I: To the Conquest by Richard Lion Heart*. Cambridge: Cambridge University Press.

- 1948 *A History of Cyprus. Volume III: The Frankish Period, 1432-1571*. Cambridge: Cambridge University Press.

- 1952 *A History of Cyprus. Volume IV: The Ottoman Province, the British Colony, 1571-1948*. Cambridge: Cambridge University Press.

Hodder, I. (ed.)

- 1997 Always Momentary, Fluid and Flexible: Towards a Reflexive Excavation Methodology. *Antiquity* 71: 691-700.

- 1999 *The Archaeological Process: An Introduction*. Oxford: Blackwell.

- 2000 *Towards Reflective Method in Archaeology: The Example of Çatalhöyük*. BIAA Monograph No. 28. Cambridge: McDonald Institute for Archaeological Research.

Horden, P. and N. Purcell

- 2000 *The Corrupting Sea: A Study of Mediterranean History*. Oxford: Blackwell.

Hornby, W.F. and M. Jones

- 1991 *An Introduction to Settlement Geography*. Cambridge: Cambridge University Press.

Howitt-Marshall, D.S.

- 2003 The Cyprus Underwater Project 2002: A Preliminary Report. *Enalia – Journal of the Hellenic Institute of Marine Archaeology*. 7: 28-37.

- forthcoming The Cyprus Underwater Project 2002 & 2004: A Re-Appraisal of the Maritime Cultural Landscape of Western Cyprus. *Report of the Department of Antiquities, Cyprus*.

Iacovou, M.

- 2002 Amathous: An Early Iron Age Polity in Cyprus. The Chronology of Its Foundation. *Report of the Department of Antiquities, Cyprus*: 101-122.

Iacovou, M. (ed.)

- 2004a *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11. London: British School at Athens.

Iacovou, M.

- 2004b Editor's Preface. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 11-15. London: British School at Athens.

Ingold, T.

- 1993 The Temporality of the Landscape. *World Archaeology* 25 (2): 152-174.

- Ionas, I.
1988 *La Maison Rurale de Chypre (XVIIIe-XXe Siècle): Aspects Et Techniques De Construction*. Nicosia: Cyprus Research Centre.
- 2001 Le Calendrier du Paysan Chypriote. *Epetiris tou Kendrou Epistimonikon Erevnon* (27): 367-398.
- Isbell, W.H.
2000 What Should We Be Studying: The 'Imagined Community' and the 'Natural Community'. In Canuto, M.A. and J. Yaeger (eds.), *The Archaeology of Communities: A New World Perspective*. 243-266. London: Routledge.
- James, H.F.
2001 *TS07: Kato Koutraphas Mandres*. Troodos Archaeological Project and Environmental Survey - Field Reports 2001.
<http://www.taesp.arts.gla.ac.uk/Landscape/SIA/TS07.htm> Last accessed 22 March 2003.
- Jeffery, G.
1983 *A Description of the Historic Monuments of Cyprus: Studies in the Archaeology and Architecture of the Island*. London: Zeno.
- Joffe, A.H.
1993 Settlement and Society in Early Bronze Age I and II, Southern Levant: Complementarity and Contradiction in a Small-Scale Complex Society. *Monographs in Mediterranean Archaeology* (3): 8-21.
- Johnson, M.
1999 *Archaeological Theory: An Introduction*. Oxford: Blackwell.
- 2004 Archaeology and Social Theory. In Bintliff, J.L. (ed.), *A Companion to Archaeology*. 92-109. Oxford: Blackwell.
- Kain, R.J.P. and E. Baingent
1992 *The Cadastral Map in the Service of the State: A History of Property Mapping*. Chicago and London: The University of Chicago Press.
- Karageorghis, V.
1971 Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1970. *Bulletin de Correspondance Hellénique* 95: 335-432.
- 1978 Chroniques des Fouilles à Chypre. *Bulletin de Correspondance Hellénique* 102.
- 1983 Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1982. *Bulletin de Correspondance Hellénique* 107: 905-953.
- 2001 Patterns of Fortified Settlement in the Aegean and Cyprus C.1200 B.C. *In Defensive Settlements of the Aegean and the Eastern Mediterranean After C.1200 B.C. Proceedings of an International Workshop Held at Trinity College Dublin, 7th-9th May, 1999*. Nicosia.
- Karageorghis, V. and M. Demas
1984 *Pyla-Kokkinokremos: A Late 13th Century B.C. Fortified Settlement in Cyprus*. Nicosia: Department of Antiquities.
- 1988 *Excavations at Maa-Palaeokastro 1979-1986*. Nicosia: Department of Antiquities.
- Karageorghis, V. and D. Michaelides (eds)
1995 *Cyprus and the Sea: Proceedings of the International Symposium, Nicosia 25-26 September 1993*. 228-246. Nicosia: University of Cyprus.
- 1996 *The Development of the Cypriot Economy From the Prehistoric Period to the Present Day*. Nicosia: University of Cyprus, Bank of Cyprus.

- Karouzis, G.
1977 *Land Ownership in Cyprus, Past and Present*. Nicosia: Strabo.
- Kassianidou, V.
2000 Hellenistic and Roman Mining in Cyprus. In Ioannides, G.K. and S.A. Hadjistyllis (eds.), *Acts of the Third International Congress of Cypriot Studies (Nicosia 16-20 April 1996), Volume A: Ancient Section*. 745-756. Nicosia: Society of Cypriot Studies.
- Kitchener, H.H.
1882 *One inch survey of Cyprus* London: Edward Stanford, 55 Charing Cross
- Knapp, A.B.
1997 *The Archaeology of Late Bronze Age Cypriot Society: The Study of Settlement, Survey and Landscape*. Occasional Paper Series No.4. Glasgow: Department of Archaeology, University of Glasgow.
- 2003 The Archaeology of Community on Bronze Age Cyprus: Politiko Phorades in Context. *American Journal of Archaeology* 107 (4): 559-580.
- Knapp, A.B. and W. Ashmore
1999 Archaeological Landscapes: Constructed, Conceptualized, Ideational. In Ashmore, W. and A.B. Knapp (eds.), *Archaeologies of Landscapes: Contemporary Perspectives*. 1-30. Malden, Mass.; Oxford: Blackwell Publishers.
- Knapp, A.B. and M. Given
2004 Social Landscapes and Social Space: The Sydney Cyprus Survey Project. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 77-93. London: British School at Athens.
- Knapp, A.B., V. Kassianidou, and M. Donnelly
2001 The Excavations at Politiko Phorades, Cyprus: 1996-2000. *Near Eastern Archaeology* 64: 202-208.
- Kolb, M.J.
1997 Labor Mobilization, Ethnohistory, and the Archaeology of Community in Hawai'i. *Journal of Archaeological Method and Theory* 4 (3/4): 265-285.
- Kolb, M.J. and J.E. Snead
1997 It's A Small World After All. *American Antiquity* 62: 609-628.
- Kyrris, C.P.
1996 *History of Cyprus. 2nd Edition*. Nicosia: Lampousa Publications.
- Lang, R.H.
1998 Cyprus: Its History, Its Present Resources, and Future Prospects. First Published in 1878. In Martin, D.W. (ed.), *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5*. 274-306. Altamont, New York: Greece and Cyprus Research Center, Inc.
- Last, J.S.
1954 Ant. D. 44/54, Akrotiri Airfield, Archaeological Survey. Unpublished report and papers from the Department of Antiquities, Cyprus.
- Lécuyer, N. and D. Michaelides
2004 Archaeological Survey at Potamia-Ayios Sozomenos. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 139-149. London: British School at Athens.

- Leidwanger, J.
2004 Episkopi Bay Survey, Cyprus, 2003. *Institute of Nautical Archaeology Quarterly* 31 (2): 17-27.
- forthcoming The Underwater Survey at Episkopi Bay: A Preliminary Report on the 2004 Field Season. *Report of the Department of Antiquities, Cyprus*.
- Leonard, J.R.
1995 Evidence for Roman Ports, Harbours and Anchorages. In Karageorghis, V. and D. Michaelides (eds.), *Cyprus and the Sea: Proceedings of the International Symposium, Nicosia 25-26 September 1993*. 228-246. Nicosia: University of Cyprus.
- 1997 Harbor Terminology in Roman Peripoli. In Swiny, S., R.L. Hohlfelder, and H.W. Swiny (eds.), *Res Maritimae: Cyprus and the Eastern Mediterranean From Prehistory to Late Antiquity. Proceedings of the 2nd International Symposium 'Cities on the Sea,' Nicosia, Cyprus, October 18-22, 1994*. American Schools of Oriental Research Archaeological Reports 4; Cyprus American Archaeological Research Institute Monograph Series, Volume 1. 163-200. Atlanta, Georgia: Scholars Press.
- Light, H.
1998 Travels in Egypt, Nubia, Holy Land, Mount Libanon, and Cyprus in the Year 1814. First Published 1818. In Martin, D.W. (ed.), *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5*. 153-159. Altamont, New York: Greece and Cyprus Research Center, Inc.
- Lightfoot, K.G., A. Martinez, and A.M. Schiff
1998 Daily Practice and Material Culture in Pluralistic Social Settings: An Archaeological Study of Culture Change and Persistence From Fort Ross, California. *American Antiquity* 63 (2): 199-222.
- Lo Cascio, E.
1999 The Population of Roman Italy in Town and Country. In Bintliff, J. and K. Sbonias (eds.), *The Archaeology of the Mediterranean Landscape, Volume 1: Reconstructing Past Population Trends in Mediterranean Europe (3000 BC-AD 1800)*. 159-171. Oxford: Oxbow Books.
- Locke, M.J.
1998 The Voyage of Mr. John Locke to Jerusalem. First Published in 1589. In Martin, D.W. (ed.), *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5*. 6-11. Altamont, New York: Greece and Cyprus Research Center, Inc.
- Loizos, P.
1981 *The Heart Grown Bitter: A Chronicle of Cypriot War Refugees*. Cambridge: Cambridge University Press.
- 2003 *Grace In Exile*. Nicosia: Moufflon Publications Ltd.
- MacKay, D.B.
1994 A View From The Outskirts: Realignment From Modern to Postmodern in the Archaeological Study of Urbanism. In Aufrecht, W.E., N.A. Mirau, and S.W. Gauley (eds.), *Urbanism in Antiquity From Mesopotamia to Crete*. 278-285. Sheffield: Sheffield University Press.
- Manning, S.W. and L. Hulin
2005 Maritime Commerce and Geographies of Mobility in the Late Bronze Age of the Eastern Mediterranean: Problematizations. In Blake, E. and A.B. Knapp (eds.), *The Archaeology of Mediterranean Prehistory*. Blackwell Studies in Global Archaeology, 270-302. Oxford: Blackwell Publishing.

- Manning, S.W., D. Sewell, and E. Herscher
 2002 Late Cypriot IA Maritime Trade in Action: Underwater Survey at Maroni Tsarroukkas and the Contemporary East Mediterranean Trading System. *Annual of the British School at Athens* 97: 97-162.
- Martin, D. W. (ed.)
 1998 *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5*. Altamont, New York: Greece and Cyprus Research Center, Inc.
- Mattingly, D.
 2000 Methods of Collection, Recording and Quantification. In Francovich, R., H. Patterson, and G. Barker (eds.), *The Archaeology of the Mediterranean Landscape, Volume 5: Extracting Meaning From Ploughsoil Assemblages*. 5-15. Oxford: Oxbow.
- McCartney, C.
 2002 TAESP 2000-2002: Interim Report of Stone Finds. Unpublished.
- forthcoming Assemblage Diversity in the Early/Middle Cypriot Aceramic Neolithic. In Astruc, L., D. Binder, and F. Briois (eds.), *PPN Communities Technical System Diversity: Towards Social Behaviour: 5th International Workshop on PPN Chipped Stone Industries in the Near-East, Fréjus (France) 1-5 March 2004*.
- McClennan, M.C. and M.L. Rautman
 1995 Where Have All the Farmers Gone? The Cypriot Countryside in the Seventh to Tenth Centuries (Abstract). In Wallace, P.W. (ed.), *Visitors, Immigrants and Invaders in Cyprus' Conference Report*. 85-86. Albany: Institute of Cypriot Studies, University at Albany, State University of New York.
- McFadden, G.H.
 1946 A Tomb of the Necropolis of Ayios Ermoyenis at Kourion. *American Journal of Archaeology* 50 (4): 449-489.
- Megaw, A.H.S.
 1993 The Episcopal Precinct at Kourion and the Evidence for Relocation. In Bryer, A.A.M. and G.S. Georghallides (eds.), *The Sweet Land of Cyprus*. 53-69. Nicosia: Cyprus Research Centre for the Society for the Promotion of Byzantine Studies.
- Meiggs, R.
 1982 *Trees and Timber in the Ancient Mediterranean World*. Oxford: The Clarendon Press.
- Mejelle
 1901 *The Mejelle*. Translated by C.R. Tyser, D.G. Demetriades and Ismail Haqqi Effendi. Nicosia: Government Printing Office.
- Michaelides, D.
 1996 The Economy of Cyprus During the Hellenistic and Roman Periods. In Karageorghis, V. and D. Michaelides (eds.), *The Development of the Cypriot Economy From the Prehistoric Period to the Present Day*. 193-207. Nicosia: University of Cyprus, Bank of Cyprus.
- Mitford, T.B.
 1980 Roman Cyprus. In Temporini, H. and W. Haase (eds.), *Aufstieg und Niedergang der Römischen Welt: Geschichte und Kultur Roms im Spiegel der Neueren Forschung*. 1285-1384. Berlin: Walter de Gruyter.
- Monks, G.G.
 1992 Architectural Symbolism and Non-Verbal Communication at Upper Fort Garry. *Historical Archaeology* 26 (2): 37-57.

- Monmonier, M.
1996 *How to Lie With Maps. 2nd Edition.* London/Chicago: The University of Chicago Press.
- Montague, J.
1998 A Voyage Performed by the Late Earl of Sandwich Round the Mediterranean in the Years 1738 and 1739. First Published in 1799. In Martin, D.W. (ed.), *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5.* 28-35. Altamont, New York: Greece and Cyprus Research Center, Inc.
- Morris, C.E. and A.A.D. Peatfield
1987 Pottery From the Cyprus Underwater Survey, 1983. *Report of the Department of Antiquities, Cyprus:* 199-212.
- Murray, A., A. Smith, and H. Walters
1900 *Excavations in Cyprus.* London: Trustees of the British Museum.
- Neophytou, K.
1997 *Cypriotica.* Republic of South Africa: Typos International.
- Noller, J.S. and W.W. Locke
1998 Lichenometry. In Sowers, J.M., J.S. Noller, and W.R. Lettis (eds.), *Dating and Earthquakes: Review of Quaternary Geochronology and Its Application to Paleoseismology.* 2-417-2-433. Washington, DC: U.S. Nuclear Regulatory Commission.
- Ohnefalsch-Richter, M.
1893 *Kypros, the Bible and Homer: Oriental Civilization, Art and Religion in Ancient Times.* London: Asher.
- Osborne, R.
1987 *Classical Landscape With Figures: The Ancient Greek City and Its Countryside.* London: George Philip.
- 1992 'Is It a Farm?' The Definition of Agricultural Sites and Settlements in Ancient Greece. In Wells, B. (ed.), *Agriculture in Ancient Greece: Proceedings of the Seventh International Symposium at the Swedish Institute at Athens, 16-17 May, 1990.* 21-27. Stockholm: Swedish Institute at Athens.
- Papadopoulos, T.
1965 *Social and Historical Data on Population (1570-1881).* Nicosia: Cyprus Research Centre.
- Parks, D.A.
1996 Excavations at Kourion's Amathus Gate Cemetery, 1995. *Report of the Department of Antiquities, Cyprus:* 127-133.
- 1997 Excavations at Kourion's Amathus Gate Cemetery, 1996. *Report of the Department of Antiquities, Cyprus:* 271-276.
- Parks, D.A., C.M. Mavromatis, and N.K. Harper
2001 Preliminary Report of the 2000 Excavations at Kourion's Amathus Gate Cemetery. *Report of the Department of Antiquities, Cyprus:* 233-245.
- Peltenburg, E.
2000 From Nucleation to Dispersal. Late Third Millennium BC Settlement Transformation in the Near East and Aegean. *Subartu 7:* 183-206.
- Peltenburg, E.J., S. Colledge, P. Croft, A. Jackson, C. McCartney, and M.A. Murray
2000 Agro-Pastoralist Colonization of Cyprus in the 10th Millennium BP: Initial Assessments. *Antiquity 74 (286):* 844-853.

- Perbellini, G.
1988 The Venetian Defences of Cyprus. *Fort: Fortress Study Group* 16: 7-44.
- Petit, T.
2001 The First Palace of Amathus and the Cypriot Poleogenesis. In Nielsen, I. (ed.), *The Royal Palace Institution in the First Millennium BC*. Monographs of the Danish Institute at Athens, vol, 53-75. Athens: Danish Institute at Athens.
- Pierides, G.P.
1998 *Tetralogy of the Times Stories of Cyprus*. Minneapolis: Nostos Books.
- Pitcairn, A.
1937 *Report on Soil Erosion in Cyprus*. Nicosia: Cyprus Government Printing Office.
- Pococke, R.
1998 Description of the East, and Some Other Countries. Volume II, Part I, Observations on Palestine or the Holy Land, Syria, Mesopotamia, Cyprus and Candia. First Published in 1745. In Martin, D.W. (ed.), *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5*. 35-56. Altamont, New York: Greece and Cyprus Research Center, Inc.
- Polunin, O. and A. Huxley
1990 *Flowers of the Mediterranean*. London: Chatto and Windus.
- Porcacchi, T.
1908 L'Isole piu Famose del Mondo. First Published 1576. In Cobham, C.D. (ed.), *Excerpta Cypria: Materials for a History of Cyprus*. 162-170. Cambridge: Cambridge University Press.
- Praetzellis, A.
1998 Introduction: Why Every Archaeologist Should Tell Stories Once in a While. *Historical Archaeology* 32 (1): 1-3.
- Proussis, C.M.
1982 The Chapel of Ayios Ermoyenis. In Swiny, H.W. (ed.), *An Archaeological Guide to the Ancient Kourion Area and the Akrotiri Peninsula*. 148-150. Nicosia: Department of Antiquities, Cyprus.
- Purcell, H.D.
1969 *Cyprus*. New York: Praeger.
- Rautman, M.
1998 Handmade Pottery and Social Change: The View From Late Roman Cyprus. *Journal of Mediterranean Archaeology* 11: 81-104.
- 2003 *A Cypriot Village of Late Antiquity: Kalavastos-Kopetra in the Vasilikos Valley*. Supplementary Series Number 52. Portsmouth, Rhode Island: Journal of Roman Archaeology.
- RCASP
2003 *The Rough Cilicia Archaeological Survey Project: Preliminary Report of the 2003 Season*.
http://pasture.ecn.purdue.edu/~rauhn/rc2003/report/Rc03_report.htm
Last accessed 14 February 2005.
- Renfrew, C.
1973 Monuments, Mobilization and Social Organization in Neolithic Wessex. In Renfrew, C. (ed.), *The Explanation of Culture Change: Models in Prehistory*. 539-558. London: Duckworth.

- 1976 Megaliths, Territories and Populations. In de Laet, S.J. (ed.), *Acculturation and Continuity in Atlantic Europe, Mainly During the Neolithic Period and the Bronze Age. Papers Presented at the 4th Atlantic Colloquium, Ghent 1975*. 198-220. Brugge: De Temple.
- Reyerson, K.L.
2000 Medieval Walled Space: Urban Development vs. Defense. In Tracy, J.D. (ed.), *City Walls: The Urban Enceinte in Global Perspective*. 88-116. Cambridge: Cambridge University Press.
- Richard, J.
1947 Casal de Psimolofu et la Vie Rurale en Chypre au XIVe Siècle. *Mélanges d'Archéologie et d'Histoire Publiés par l'Ecole Française de Rome* 59: 121-153.
- Roberts, B.K.
1996 *Landscapes of Settlement: Prehistory to the Present*. London: Routledge.
- Rowlands, M.J.
1972 Defence: A Factor in the Organisation of Settlements. In Ucko, P.J., R. Tringham, and G.W. Dimbleby (eds.), *Man, Settlement and Urbanism: Proceedings of a Meeting of the Research Seminar in Archaeology and Related Subjects Held at the Institute of Archaeology, London University*. 447-462. London: Duckworth.
- Rupp, D.W.
1986 Problems in Byzantine Field Reconnaissance: A Non-Specialist's View. *Byzantine Studies* 13: 177-188.
- Rupp, D.W.
2004 Evolving Strategies for Investigating an Extensive Terra Incognita in the Paphos District by the Canadian Palaipaphos Survey Project and the Western Cyprus Project. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 63-76. London: British School at Athens.
- Sampson, A.
1986 Architecture and Urbanism in Manika, Chalkis. In Hägg, R. and D. Konsola (eds.), *Early Helladic Architecture and Urbanisation. Proceedings of a Seminar Held at the Swedish Institute in Athens, June 8, 1985*. Studies in Mediterranean Archaeology 76, 47-50. Göteborg: Paul Åströms Förlag.
- Sant Cassia, P.
1986 Religion, Politics and Ethnicity in Cyprus During the Turkokratia. *Archives Européennes de Sociologie* 27: 3-28.
1993 Banditry, Myth and Terror in Cyprus and Other Mediterranean Societies. *Comparative Studies in Society and History* 35: 773-795.
- Schon, R.
2000 On a Site and Out of Sight: Where Have Our Data Gone? *Journal of Mediterranean Archaeology* 13: 107-111.
2002 Seeding the Landscape: Experimental Contributions to Regional Survey Methodology. Ph.D. Dissertation, Bryn Mawr College, Bryn Mawr, Pennsylvania.
- Sheen, A.
1981 Lemba Archaeological Project, Cyprus, 1979: Preliminary Report. Appendix 1, Stavros tis Psokas Survey, 1979. *Levant* 13: 39-42.

Simmons, A.

- 1992 Preliminary Report on the Akrotiri Peninsula Survey, 1991. *Report of the Department of Antiquities, Cyprus* 1992: 9-11.
- 1999 *Faunal Extinction in an Island Society: Pygmy Hippopotamus Hunters of Cyprus*. Interdisciplinary Contributions to Archaeology. Dordrecht, Boston: Kluwer Academic/Plenum.

Simpson, R.H. and O.T.P.K. Dickinson

- 1979 *A Gazetteer of Aegean Civilisation in the Bronze Age, Volume 1: The Mainland and Islands*. Göteborg: Paul Åströms Förlag.

Smith, A.T.

- 2003 *The Political Landscape: Constellations of Authority in Early Complex Polities*. Berkeley: University of California Press.

Sollars, L.

- 2001 *Regional Survey In The Mediterranean: Presentations, Re-Presentations and Archaeological Landscapes*. Unpublished M.Phil Dissertation: Department of Archaeology, University of Glasgow.
- 2005 Settlement in the Prehistoric Mediterranean. In Blake, E. and A.B. Knapp (eds.), *The Archaeology of Mediterranean Prehistory*. Blackwell Studies in Global Archaeology, 252-269. Oxford: Blackwell Publishing.

Soren, D.

- 1979 The Temple of Apollo at The Sanctuary of Apollo Hylates. *Report of the Department of Antiquities, Cyprus*: 321-327.

Sørensen, L. W. and D. W. Rupp (eds)

- 1993 *The Land of The Paphian Aphrodite, Volume 2. The Canadian Palaipaphos Survey Project: Artifact and Ecofactual Studies*. Göteborg: Paul Åström's Förlag.

Spyropoulos, T.G.

- 1998 Pellana, the Administrative Centre of Prehistoric Laconia. In Cavanagh, W.G. and S.E.C. Walker (eds.), *Sparta in Laconia: Proceedings of the 19th British Museum Classical Colloquium Held With the British School at Athens and Kings and University Colleges London 6-8 December 1995*. 28-38. London: British School at Athens.

Stanley Price, N.P.

- 1980 *Early Prehistoric Settlement on Cyprus: A Review and Gazetteer of Sites, 6500-3000 B.C.* BAR International Series 65. Oxford: BAR.

Statistical Abstract

- 1956 *Cyprus: Statistical Abstract 1956, No. 2*. Nicosia: Statistics Section, Financial Secretary's Office.

Steel, L.

- 2004 Archaeology in Cyprus 1997-2002. *Society for the Promotion of Hellenic Studies, British School at Athens Archaeological Reports for 2003-2004*: 93-111.

Strabo

- 1929 *The Geography of Strabo, Volume VI. With an English Translation by Horace Leonard Jones*. Loeb. London: William Heinemann.

Stylianou, A. and J.A. Stylianou

- 1980 *The History of the Cartography of Cyprus*. Nicosia: Cyprus Research Centre.
- 1985 *The Painted Churches of Cyprus: Treasures of Byzantine Art*. London: Trigraph.

- Swiny, H. W. (ed.)
1982a *An Archaeological Guide to the Ancient Kourion Area and the Akrotiri Peninsula*. Nicosia: Department of Antiquities.
- Swiny, H.W.
1982b The Water Supply. In Swiny, H.W. (ed.), *An Archaeological Guide to the Ancient Kourion Area and the Akrotiri Peninsula*. 106-109. Nicosia: Department of Antiquities, Cyprus.
- Swiny, S.
1981 Bronze Age Settlement Patterns in Southwest Cyprus. *Levant* 13: 51-87.
- 1986 *The Kent State University Expedition to Episkopi Phaneromeni. Part 2. Studies in Mediterranean Archaeology, Volume LXXIV: 2*. Nicosia: Paul Astroms Forlag.
- 2004 The Role of Intuitive and Small Scale Surveys in Landscape Archaeology. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 55-61. Athens: British School at Athens.
- Swiny, S., R. L. Hohlfelder and H. W. Swiny (eds)
1997 *Res Maritimae: Cyprus and the Eastern Medit From Prehistory to Late Antiquity. Proceedings of the 2nd International Symposium 'Cities on the Sea,' Nicosia, Cyprus, October 18-22, 1994*. American Schools of Oriental Research Archaeological Reports 4; Cyprus American Archaeological Research Institute Monograph Series, Volume 1. Atlanta, Georgia: Scholars Press.
- Swiny, S. and C. Mavromatis
2000 Land Behind Kourion: Results of the 1997 Sotira Archaeological Project Survey. *Report of the Department of Antiquities, Cyprus*: 433-452.
- Swiny, S.
2004 The Role of Intuitive and Small Scale Surveys in Landscape Archaeology. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 55-61. London: British School at Athens.
- Theodosiou, A. and A. Pitta
1996 Settlements Architecture Akamas (Οικισμοί Αρχιτεκτονική Ακάμα). Nicosia: Anastasios G. Leventis Foundation.
- Thirgood, J.V.
1987 *Cyprus: A Chronicle of Its Forests, Land, and People*. Vancouver: University of British Columbia.
- Thomas, J.
1996 *Time, Culture and Identity*. London: Routledge.
- Thubron, C.
1975 *Journey into Cyprus*. London: Penguin Books.
- Tilley, C.
1994 *A Phenomenology of Landscape: Places, Paths and Monuments*. Oxford: Berg.
- Tilley, C. and W. Bennett
2004 *The Materiality of Stone. Explorations in Landscape Phenomenology 1*. Oxford, New York: Berg.

Todd, I.A.

- 2004 Field Survey in the Vasilikos Valley. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 43-54. London: British School at Athens.

Tschan, A.P., W. Raczkowski, and M. Latalowa

- 2000 Perception and Viewsheds: Are They Mutually Exclusive? In Lock, G. (ed.), *Beyond the Map: Archaeology and Spatial Technologies*. 28-48. Oxford: IOS Press.

Tsintides, T.C., G.N. Hadjikyriakou, and C.S. Christodoulou

- 2002 *Trees and Shrubs in Cyprus*. Lefkosia: Anastasios G. Leventis Foundation; Cyprus Forest Association.

Tufte, E.R.

- 1990 *Envisioning Information*. Cheshire, Connecticut.: Graphics Press.

Turner, W.

- 1998 Journal of a Tour in the Levant. First Published in 1820. In Martin, D.W. (ed.), *English Texts: Frankish and Turkish Periods. Sources for the History of Cyprus, Volume 5*. 159-189. Altamont, New York: Greece and Cyprus Research Center, Inc.

Ucko, P.J., R. Tringham, and G.W. Dimbleby (eds.)

- 1972 *Man, Settlement and Urbanism: Proceedings of a Meeting of the Research Seminar in Archaeology and Related Subjects Held at the Institute of Archaeology, London University*. London: Duckworth.

Unwin, A.H.

- 1925 *A Short Description of the Forests of Cyprus. Second Edition*. Nicosia: Government Printing Office.

Urwin, N.F.

- 2003 Unpublished Field Notes for Estimating Ages of Olive Trees. Produced during the Troodos Archaeological and Environmental Survey Project.

van Dommelen, P., F. Gerritsen, and A.B. Knapp

- 2005 Common Places: Archaeologies of Community and Landscape. In Attema, P., A. Nijboer and A. Zifferero (eds.), *Papers in Italian Archaeology VI. Communities and Settlements from the Neolithic to the Early Medieval Period. Proceedings of the 6th Conference of Italian Archaeology held at the University of Groningen, Groningen Institute of Archaeology, The Netherlands, April 15 - 17, 2003*. BAR International Series. Oxford: Archaeopress, Volume 1.

Villamont

- 1908 Les Voyages du Seigneur de Villamont, Chevalier de l'Ordre de Hierusalem, Gentil-Homme du Pays de Bretagne. First Published 1598. In Cobham, C.D. (ed.), *Excerpta Cyprica: Materials for a History of Cyprus*. 171-178. Cambridge: Cambridge University Press.

von Baumgarten, M.

- 2000 Itineraria. First Published 1594, Nürnberg. In Roberts, L. (ed.), *Latin Texts From the First Century B.C. to the Seventeenth Century A.D. Sources for the History of Cyprus, Volume 8*. 190-191. Altamont: Greece and Cyprus Research Center, Inc.

von Wartburg, M.-L.

- 2000 Sugar. *Report of the Department of Antiquities, Cyprus*.

- 2001 The Archaeology of Cane Sugar Production: A Survey of Twenty Years of Research in Cyprus. *The Antiquaries Journal* 81: 305-335.

- Vroom, J.
1998 Early Modern Archaeology in Central Greece: The Contrasts of Artefact-Rich and Sherdless Sites. *Journal of Mediterranean Archaeology* 11 (2): 131-164.
- Webb, J.M. and D. Frankel
2004 Intensive Site Survey. Implications for Estimating Settlements Size, Population and Duration in Prehistoric Bronze Age Cyprus. In Iacovou, M. (ed.), *Archaeological Field Survey in Cyprus: Past History, Future Potentials. Proceedings of a Conference Held by the Archaeological Research Unit of the University of Cyprus, 1-2 December 2000*. British School at Athens Studies 11, 125-137. London: British School at Athens.
- Wessex
2002 Proposed Antennae Development, Salt Lake, The British Sovereign Base at Akrotiri, Cyprus. Archaeological Desk-Based Study, Geophysical and Geological Assessment. Ref: 51134.01. Unpublished report by Wessex Archaeology prepared on behalf of the Ministry of Defence.
- Wheatley, D. and M. Gillings
2000 Vision, Perception and GIS: Developing Enriched Approaches to the Study of Archaeological Visibility. In Lock, G. (ed.), *Beyond the Map: Archaeology and Spatial Technologies*. 1-27. Oxford: IOS Press.
2002 *Spatial Technology and Archaeology: The Archaeological Applications of GIS*. London: Routledge.
- Whitelaw, T.M.
1991 The Ethnoarchaeology of Recent Rural Settlement and Land Use in Northwest Keos. In Cherry, J.F., J.L. Davis, and E. Mantzourani (eds.), *Landscape Archaeology As Long-Term History: Northern Keos in the Cycladic Islands From Earliest Settlement Until Modern Times*, *Monumenta Archaeologica* 16. 403-454. Los Angeles: UCLA Institute of Archaeology.
- Whittow, M.
1990 Ruling the Late Roman and Early Byzantine City: A Continuous History. *Past and Present* 129: 3-29.
- Wilkinson, T.
1999 Demographic Trends From Archaeological Survey: Case Studies From the Levant and Near East. In Bintliff, J. and K. Sbonias (eds.), *The Archaeology of the Mediterranean Landscape, Volume 1: Reconstructing Past Population Trends in Mediterranean Europe (3000 B.C.-A.D. 1800)*. 45-64. Oxford: Oxbow Books.
- Witcher, R.E.
1999 GIS and Landscapes of Perception. In Gillings, M., D. Mattingly, and J. van Dalen (eds.), *Geographical Information Systems and Landscape Archaeology. The Archaeology of the Mediterranean Landscape, Volume 3*. 13-22. Oxford: Oxbow.
- WSBAAS
1995 *The Akrotiri Archaeological Trail*. Guide produced locally by the Western Sovereign Base Area Archaeological Society.
- Yaeger, J. and M.A. Canuto
2000 Introducing an Archaeology of Communities. In Canuto, M.A. and J. Yaeger (eds.), *The Archaeology of Communities: A New World Perspective*. 1-15. London: Routledge.
- Young, J. and S. Young
1955 *Terracotta Figurines From Kourion in Cyprus*. Philadelphia: University Museum, University of Pennsylvania.

Young, S.

1982 Episkopi Serayia: The Medieval Manor and the Sugar Industry of Cyprus. In Swiny, H.W. (ed.), *An Archaeological Guide to the Ancient Kourion Area and the Akrotiri Peninsula*. 153-159. Nicosia: Department of Antiquities, Cyprus.

Zangger, E., M.E. Timpson, Yazvenko, F. Kuhnke, and J. Knauss

1997 The Pylos Regional Archaeological Project Part II: Landscape Evolution and Site Preservation. *Hesperia* 66 (4): 549-641.

Zubrow, E. and J. Robinson

1999 Chance and The Human Population: Population Growth in the Mediterranean. In Bintliff, J. and K. Sbonias (eds.), *The Archaeology of the Mediterranean Landscape, Volume 1: Reconstructing Past Population Trends in Mediterranean Europe (3000 BC-AD 1800)*. 133-144. Oxford: Oxbow Books.