

Sofia-Irini (Sorina) Spanou

HOUSING MEMORY:
ARCHITECTURE, MATERIALITY AND TIME

CASE STUDIES FROM EARLY PREHISTORIC CYPRUS

VOLUME I: TEXT

PhD Archaeology
University of Edinburgh
2008

I hereby declare that this dissertation has been composed by me (save where acknowledgment is made below) and is based on my work.

Abstract

This thesis is concerned with the concept of memory, its role in inter-generational transmission, and identity formation, within the context of pre-literate, small-scale societies. It explores different mnemonic practices in relation to different perceptions of time, and the continuities or discontinuities (locational, temporal and symbolic) with the past they create, as part of exploring aspects of cultural cognition in prehistory. Through these three interrelated concepts – memory, time, and cognition – and their intricate relationships with material culture, especially architecture, landscapes, practical action and social life, the aim is to suggest a theoretical and methodological framework within which to explore how memory of the past was not only formed, maintained and transmitted but also transformed, concealed or ‘destroyed’ in the prehistoric present.

The geographical and chronological framework of this study is provided by the rich archaeological record of early prehistoric Cyprus. Through the concept of memory, and using selected site data-sets at different spatial and temporal scales, the objective is to offer a more textured narrative of socio-cultural developments on the island that take into consideration the questions of how continuity and change are *perceived* and experienced, how individuals and communities ‘see’ themselves in history, and what some of the practices and material media are that shape autobiographical and social memory. Early Cypriot prehistory is characterised by a, largely, domestic landscape occupied by small-scale communities, where public or monumental architecture as well as long-lived *tell* sites are not explicitly attested. Rather than explaining away these ‘anomalies’, this thesis delves into the study of the ‘ordinary landscape’ of houses and communities in time and space and at different scales in accordance with our research aims. It, thus, diverges from the current archaeological research on memory and the monumental and regards architecture as a biographical object that encapsulates personal and communal histories. The analytical strategies that are employed in this study involve an examination of two closely related elements. First, the temporal depth of activities with regard to the life histories of buildings and people and how these intersect with larger patterns of social memory are explored. Secondly, through a *topoanalysis*, the spatiality and visual boundaries of remembering and forgetting, through the medium of architecture, are examined.

Similar issues have recently attracted a lot of attention from many disciplines. In an attempt to link the various, often ambiguous, conceptualisations of memory – as a cognitive process, as a social construct or as an experiential domain – with archaeological ‘visibility’ and methodology this research utilises insights from a variety of cross-disciplinary sources. This research is a contribution towards *the past in the past approach* by: **a.** building on these works and expanding our current understanding of issues of cultural transmission and memory by striking a better balance between ‘inscription’ and ‘incorporated practices’ social and biographical memory, material and ephemeral contexts (chapters 1, 4-5). This is attempted by using an explicit multi-scalar approach to the material and a *practice*-based interpretative framework (chapters 2-3); **b.** demonstrating contextually the limitations and possibilities of the theoretical endeavour in practical contexts through dealing with the ambiguities and incompleteness of archaeological assemblages, depositional patterns and stratigraphic sequences, as well as with palimpsests of activities in settlement contexts, with the underlying aim to understand the various dimensions of continuity and discontinuity (chapters 6-8); **c.** critically examining concepts from a rapidly growing multi-disciplinary literature and their often problematic applications to prehistoric material and juxtapose the Western model of memory with anthropological insights (chapter 9).

Acknowledgments

I would like to express my sincere thanks to my supervisor Professor Eddie Peltenburg for his advice and support, as well as for his patience with the, not always for good reason, delays and constant changes in direction that this thesis took before finally deciding to take his advice and finish! I would also like to thank my second supervisor Professor Trevor Watkins for introducing me into the difficult waters of cognitive archaeology and made me think about archaeology in exciting and new ways.

Travel grants from CBRL, Abercrombie, and small project grant, University of Edinburgh enabled me to do research in Cyprus. My thanks also to Dr I.A. Todd for allowing me access to the, then unpublished second volume of Tenta. Many people have given me copious amounts of support, advice and friendship in Cyprus, Greece and Edinburgh. I would particularly like to thank Phil Karsgaard, Andrew McCarthy and Lindy Crewe for all their advice and good humour as well as for helping me to formulate my ideas, involving usually frequent trips to the pub. My thanks also to Jennifer Thoms, Mel Johnson, Debbie White and Graig Williams for help and support at various stages of my thesis writing.

Finally, four people without whom I could not have made it this far deserve special mention. Ali Robertson has been my best friend. I cannot thank him enough for putting up with me especially during the last stages of writing. My parents and my sister have been a source of constant support and inspiration and I am grateful to them for all their efforts.

Table of Contents

<i>VOLUME I: TEXT</i>		
	<i>Abstract</i>	<i>i</i>
	<i>Acknowledgements</i>	<i>ii</i>
Chapter 1	Introduction: Preserving <i>versus</i> Altering the Past	2
1.1	Persistence and Change as Cognitive Phenomena	2
1.2	Time-Scales and Narrative Structure	6
1.3	Archaeologies of Memory	10
1.4	The Patterning of the Archaeological Record	12
1.5	Place, Architecture and Memory: An Intimate Relationship	15
1.6	Housing Memory in Cypriot Prehistory	16
Chapter 2	'Locating' Memory: Method and Theory	19
2.1	Research Questions and Aims of Methodology	19
2.2	Places of the Mind: The Visual and Spatial Structure of Memory and the Role of Architecture	22
2.2.1	Cognitive mapping	25
2.2.2	The qualities of place	27
2.3	'Locating' Memory and Place in the Past: Difficulties and Possibilities	30
2.4	Houses for <i>Homes</i> , Sites for <i>Communities</i> : Methodological Implications	33
2.4.1	Houses for 'homes'	35
2.4.2	Sites for 'communities'	38
Chapter 3	Slicing up Memory: From Internal to External, Individual to Society. The Status of Memory in Contemporary Discourse	42
3.1	Introduction	42
3.2	Remembering as Individuals	45
3.2.1	Memory in the laboratory	45
3.2.2	Memory in the real world	47
3.3	The <i>Loci</i> of Memory: Internal <i>versus</i> External Storage	49
3.3.1	Encoding and retrieval of information: <i>engrams</i> and <i>exograms</i>	49
3.3.2	Technological metaphors and the cognitivist paradigm	51
3.4	Remembering as Social Groups	57
3.4.1	Maurice Halbwachs and Collective Memory	58
3.4.2	Memory, History and Politics	59
3.5	Transformation and Persistence of the Past	62
3.6	Individual <i>versus</i> Society	64
3.7	Approaching Memory at a Distance: Present/Past Distinctions	66
3.8	Conclusions	70
Chapter 4	The Mnemonic Agency of Things, Places, Bodies and Social Practices	72
4.1	Introduction	72
4.2	Transmitting 'Memorable' Ideas across Time and Space: Brains, Memes and Viruses	73
4.3	Memory in Action: The Extended/Embodied Mind	75
4.3.1	The Extended Mind and the Agency of Objects	77

4.3.2	The Mnemonic agency of things: biographical and distributed objects	79
4.3.3	Embodied memory: skill and habit	84
4.4	Early Memories: The Role of Socialisation	90
4.5	Reflections: Memory in Practice	92
Chapter 5	Methodological Procedures for the Study of House Biographies and Repeated Practices	96
5.1	Introduction: Studying the Passage of Time	96
5.2	Research Parameters	96
5.3	<i>House Ancestry</i> : patterns of replication	101
5.4	<i>Repeated Practices</i> : stratigraphic sequences	105
5.5	<i>Topoanalysis</i> : contextual associations	111
Chapter 6	Case-Studies I: Housing Memory and Ancestry in the Neolithic	114
6.1	Introduction: Outline of Data Presentation	114
6.2	Kalavassos- <i>Tenta</i> : History of Research and Settlement Layout	115
6.2.1	Replication Types and House Ancestry	119
6.2.2	Overview of Episodes: Continuity and Discontinuity	122
6.2.3	Contextual Analysis	131
6.3	Ayios Epiktitos- <i>Vrysi</i> : History of Research and Settlement Layout	135
6.3.1	Replication Patterns and House Ancestry	138
6.3.2	Overview of Episodes: Continuity and Discontinuity	140
6.3.3	Contextual Analysis	148
6.4	Discussion: <i>Repeated Practices</i> at <i>Tenta</i> and <i>Vrysi</i>	153
6.4.1	Memory and <i>place</i> at <i>Tenta</i>	153
6.4.2	Memory and <i>place</i> at <i>Vrysi</i>	159
Chapter 7	Case-Studies II: Housing Memory and Ancestry in the Chalcolithic and Early/Middle Bronze Age	164
7.1	Kissonerga- <i>Mosphilia</i> : Settlement layout and History of Research	164
7.1.1	Replication Types and House Ancestry	168
7.1.2	Overview of Episodes: Continuity and Discontinuity	171
7.1.3	Contextual Analysis	180
7.2	Marki- <i>Alonia</i> : Settlement layout and History of Research	185
7.2.1	Replication Patterns and House Ancestry	189
7.2.2	Overview of Episodes: Continuity and Discontinuity	191
7.2.3	Contextual Analysis	195
7.3	Discussion: <i>Repeated Practices</i> at <i>Mosphilia</i> and Marki	198
7.3.1	Memory and <i>place</i> at <i>Mosphilia</i>	198
	Memory and <i>place</i> at Marki	204
Chapter 8	Case Studies III: A Selective Review of Replication Patterns and Ancestry in Early Prehistoric Cyprus	207
8.1	Introduction	207
8.2	Examples of House Replacement Practices in the Neolithic	207
8.3	An example of long-term memory in the Chalcolithic landscape	217
8.4	The Cypriot Settlement Record	220
8.5	Conclusions	225
Chapter 9	<i>What Time is This Place?</i> Conclusions and Future Research	226

9.1	Introduction	226
9.2	Building <i>Place</i> Narratives	228
9.2.1	Vertical Space as Sequences of Actions	231
9.2.2	Continuities and Transformations: Multiple Scales	232
9.2.3	Intentionality versus Routinisation	234
9.3	Settlement and Time Depth in Prehistoric Cyprus: A Working Model	236
9.4	Conclusions and Scope for Future Research	240
	<i>References</i>	245
VOLUME II: APPENDICES		
Appendix A	Sites and Chronology	286
Appendix B	Analysis Results	304
Appendix C	Maps & Plans	469
Appendix D	Architectural Data	468
Appendix E	Contextual Data	559

List of Tables

<i>Volume I</i>		
Table 1	Properties of internal and external memory	49
Table 2	Elements of social memory	64
Table 3	Longevity of house occupation: Kalavassos- <i>Tenta</i>	119
Table 4	Types of replication by period: Kalavassos- <i>Tenta</i>	120
Table 5	Summary of longevity of house occupation: Ayios Epiktitos- <i>Vrysi</i>	138
Table 6	Summary of replication types: Ayios Epiktitos- <i>Vrysi</i>	139
Table 7	Replication types: Kissonerga- <i>Mosphilia</i>	168
Table 8	Chronology of occupation phases and longevity of compounds: Marki- <i>Alonia</i>	189
Table 9	Summary of replication types: Marki- <i>Alonia</i>	189
Table 10	Life-courses of people and buildings	232
Table 11	Modes of religiosity contrasted	238
Table 12	Material correlates of forms of memory in Europe and Anatolia	239
Table 13	Material correlates of forms of memory in Cyprus	240
<i>Volume II</i>		
Appendix A	Sites and Chronology	
Table 14	List of major sites mentioned in the text	286
Table 15	Outline of chronological schemes for the Early Prehistoric period	292

Table 16	Calibrated (BC) dates from selected sites	294
Table 17	Grouping of artefacts according to functional classes	301
Appendix B	Analysis: Results	304
Table 18	Replication types of buildings	305
Table 19	Replication patterns: Kalavastos- <i>Tenta</i> (Periods 4-2)	306
Table 20	Elements of house architecture and their life cycles: Kalavastos- <i>Tenta</i> (Periods 4-2)	311
Table 21	Distribution of artefact classes and features by episode and period: Kalavastos- <i>Tenta</i> (Periods 4-2)	317
Table 22	Superimposition and continuity: Ayios Epiktitos- <i>Vrysi</i>	322
Table 23	Elements of house architecture and their life cycles: Ayios Epiktitos- <i>Vrysi</i>	325
Table 24	Artefact count by episode and functional category: Ayios Epiktitos- <i>Vrysi</i>	328
Table 25	Occurrence of artefact classes by house in a. closure episode and b. renovation: Ayios Epiktitos- <i>Vrysi</i>	337
Table 26	Superimposition and continuity: Kissonerga- <i>Mosphilia</i>	339
Table 27	Elements of house architecture and its life courses: Kissonerga- <i>Mosphilia</i>	343
Table 28	Artefact count by episode and by functional category: Kissonerga- <i>Mosphilia</i>	346
Table 29	Replication types: Marki- <i>Alonia</i>	356
Table 30	Elements of compound architecture: Marki - <i>Alonia</i>	363
Table 31	Artefact count by episode and functional class: Marki - <i>Alonia</i>	384

List of Figures

<i>Volume I</i>		
Figure 1	The role of time and space in the creation of place memory	21
Figure 2	Schematic representation of house replacement: Kalavastos- <i>Tenta</i>	118
Figure 3	Percentages of artefacts by episode from all structures and periods: Kalavastos- <i>Tenta</i>	131
Figure 4	Occurrence of objects classes by episode from all structures and periods: Kalavastos- <i>Tenta</i>	132
Figure 5	Fragmentation of artefacts by episode: Kalavastos- <i>Tenta</i>	132
Figure 6	Schematic representation of house replacement: Ayios Epiktitos- <i>Vrysi</i>	137

Figure 7	Percentages of artefacts by episode from all structures and periods: <i>Ayios Epiktitos-Vrysi</i>	148
Figure 8	Graph showing the contribution of each episode to the total assemblage of individual houses: <i>Ayios Epiktitos-Vrysi</i>	148
Figure 9	Fragmentation of objects found <i>in situ</i> sealed by episodes of renewal/closure: <i>Ayios Epiktitos-Vrysi</i>	150
Figure 10	Fragmentation of objects found <i>in situ</i> sealed by episodes of renovation: <i>Ayios Epiktitos-Vrysi</i>	151
Figure 11	Percentages of complete and fragmented objects from all houses by closure and renovation episode: <i>Ayios Epiktitos-Vrysi</i> .	151
Figure 12	Schematic representation of house replacement: <i>Kissonerga-Mosphilia</i>	167
Figure 13	Percentages of artefacts by episode from all structures and periods: <i>Kissonerga Mosphilia</i>	180
Figure 14	Graph showing the contribution of each episode to the total assemblage of individual houses in period 3A: <i>Kissonerga Mosphilia</i>	181
Figure 15	Graph showing the contribution of each episode to the total assemblage of individual houses in period 3B: <i>Kissonerga Mosphilia</i>	181
Figure 16	Graph showing the contribution of each episode to the total assemblage of individual houses in period 3B: <i>Kissonerga Mosphilia</i> .	181
Figure 17	Graph showing the fragmentation of objects found in buildings by episode: <i>Kissonerga Mosphilia</i>	184
Figure 18	Schematic representation of house replacement: <i>Marki-Alonia</i>	188
Figure 19	Graph showing percentages of artefacts by episode from all compounds and periods: <i>Marki-Alonia</i>	195
Figure 20	Graph showing the contribution of each episode to the total assemblage of individual compounds: <i>Marki-Alonia</i>	196
Figure 21	Diagrammatic representation of house replacement and superimposition: <i>Khirokitia-Vounoi</i> East sector (Le Brun excavations)	211
Figure 22	Diagrammatic representation of house replacement and superimposition: <i>Khirokitia-Vounoi</i> West sector (Le Brun excavations)	212
Figure 23	<i>Khirokitia-Vounoi</i> : Diagram showing attribution of Tholoi and levels to periods (Dikaios excavations)	213
Figure 24	Diagrammatic representation of <i>Sotira-Teppes</i> house stratigraphy (Dikaios excavations)	216
Volume II		
Appendix B	Analysis Results	
Figure 25	Occurrence of objects in structures by episode and by period: <i>Kalavastos-Tenta</i>	395
Figure 26	Area and contextual associations within architectural complex 14 by period: <i>Kalavastos-Tenta</i>	396

Figure 27	Area and contextual associations of buildings by period: Kalavastos- <i>Tenta</i>	397
Figure 28	Comparison of contextual data between intra and extra-mural contexts: Kalavastos- <i>Tenta</i>	398
Figure 29	Distribution of artefact classes in closed contexts (burials, pits): Kalavastos- <i>Tenta</i>	398
Figure 30	Fragmentation of registered artefacts in closed contexts (burials, pits): Kalavastos- <i>Tenta</i>	399
Figure 31a-k	Distribution of portable object in each house by episode: Ayios Epiktitos- <i>Vrysi</i>	400
Figure 32	Occurrence of artefact classes by house in closure episodes: Ayios Epiktitos- <i>Vrysi</i>	406
Figure 33	Occurrence of artefact classes by house in episodes of renovation: Ayios Epiktitos- <i>Vrysi</i>	407
Figure 34	Comparison of contextual data between intra and extra-mural contexts: Ayios Epiktitos- <i>Vrysi</i>	408
Figure 35a-c	Functional class distribution of portable objects by episode in Periods 3a-4: Kissonerga- <i>Mosphilia</i>	409
Figure 36a-j	Functional class distribution of portable objects by episode in Periods 3A & B: Kissonerga- <i>Mosphilia</i>	412
Figure 37a-p	Functional class distribution of portable objects by episode in Period 4: Kissonerga- <i>Mosphilia</i>	417
Figure 38	Fragmentation of Objects Found in Building 3 (“Pithos House”) by episode: Kissonerga- <i>Mosphilia</i>	425
Figure 39a-c	Fragmentation of objects found in buildings according to functional class in Periods 3A-4: Kissonerga- <i>Mosphilia</i>	426
Figure 40a-o	Fragmentation of objects found in individual buildings by episode: Kissonerga- <i>Mosphilia</i>	429
Figure 41	Frequency of extramural pits by period: Kissonerga- <i>Mosphilia</i>	437
Figure 42	Objects from extramural pits according to functional class in each period: Kissonerga- <i>Mosphilia</i>	438
Figure 43	Fragmentation of objects in extramural pits: Kissonerga- <i>Mosphilia</i>	439
Figure 44	Frequency of intramural pits in each episode: Kissonerga- <i>Mosphilia</i>	440
Figure 45	Distribution of objects by functional class found in intramural pits: Kissonerga- <i>Mosphilia</i>	441
Figure 46	Fragmentation of objects in intramural pits: Kissonerga- <i>Mosphilia</i>	442
Figure 47	Frequency of graves according to intra/ extramural location: Kissonerga- <i>Mosphilia</i>	443
Figure 48	Frequency of graves in each period: Kissonerga- <i>Mosphilia</i> .	444
Figure 49	Distribution of grave objects by functional class in each period: Kissonerga- <i>Mosphilia</i>	445
Figure 50	Fragmentation of grave objects in each period: Kissonerga- <i>Mosphilia</i>	446
Figure 51	Frequency of grave type in each period: Kissonerga- <i>Mosphilia</i>	447
Figure 52	Graph showing the fragmentation of objects from all compounds by episode: Marki- <i>Alonia</i>	448

Figure 53	Graph showing the functional class distribution of portable objects by episode: Marki- <i>Alonia</i>	449
Figure 54	Graph showing the number of objects in accumulation & collapse/post-abandonment episodes according to location: Marki- <i>Alonia</i>	450
Figure 55a-r	Graphs showing the functional class distribution of objects by location in phases A-H: Marki- <i>Alonia</i>	453
Appendix C	Maps & Plans	469
Figure 56	Map of Cyprus showing major prehistoric sites from the Neolithic to the Middle Bronze Age	470
Figure 57	General plan of Sotira- <i>Teppes</i>	471
Figure 58	Plan of Zone A showing Tholos 1A at Khirokitia- <i>Vounoi</i>	472
Figure 59	Plan of architectural remains at Kalavastos- <i>Tenta</i> (Periods 4-2).	473
Figure 60	General plan of Ayios Epiktitos- <i>Vrysi</i>	474
Figure 61	Ayios Epiktitos- <i>Vrysi</i> : House 1	475
Figure 62	Ayios Epiktitos- <i>Vrysi</i> : House 2A	476
Figure 63	Ayios Epiktitos- <i>Vrysi</i> : House 2B	477
Figure 64	Phase plan of Kissonerga- <i>Mosphilia</i> , Upper Terrace	478
Figure 65	Phase plan of Kissonerga- <i>Mosphilia</i> , Main Area	479
Figure 66	Marki- <i>Alonia</i> : phase plans A-B	480
Figure 67	Marki- <i>Alonia</i> : phase plans B-C	481
Figure 68	Marki- <i>Alonia</i> : phase plans C-D	482
Figure 69	Marki- <i>Alonia</i> : phase plans D-E	483
Figure 70	Marki- <i>Alonia</i> : phase plans E-F	484
Figure 71	Marki- <i>Alonia</i> : phase plans F-G	485
Figure 72	Marki- <i>Alonia</i> : phase plans G-H	486
Figure 73	Marki- <i>Alonia</i> : phase plans H-I	487

'Memory is the horizon of sensory experience, storing and restoring the experience of each sensory dimension in another, as well as dispersing and finding sensory records outside the body in a surround of entangling objects and places.'

N. Seremetakis 1996, p. 9

Chapter One

Introduction

Preserving *versus* Altering the Past

We are all sensitive to the splendors of beginnings, to the rare quality of those moments when the present is freed from the past without as yet letting anything shine through of the future that sets it into motion... Whoever allows for the idea of beginning must also allow for that of the end; as for forgetting of the past, necessary for every true rebeginning, *it is incompatible with any prefiguration of the future.*

Marc Augé 2004, pp. 5-6.

1.1 Persistence and Change as Cognitive Phenomena

The history of all human societies is marked by chronologically and spatially distinct phases of change and variation. The creation of culture-historic sequences, developmental phases and evolutionary stages is common place in archaeological theory and practice with the underlying aim to grasp the nature and extent of long-term change. Since all the evidence is normally evaluated from a *before* and *after* perspective, it is not uncommon to talk of *revolutions*, *emergence* of novel social systems such as states and empires, *colonisation* of new territories, or use terms such as *rise* and *fall* or *development* and *decline* to describe the full sequence of a given society. Whether the central tenet of such reconstructions involves technology, modes of economic production, artistic styles, migration, or ideology, all these stages effectively mark new beginnings, truly radical departures from one's past.

The causes and patterns of socio-cultural change constitute one of the most sought after subjects in archaeological research as well as one of the most difficult and elusive levels of interpretation. A great variety of explanations that link cause and effect of the observable transformations has been provided since the advent of archaeology as an academic discipline ranging from unilinear evolutionism, that views progressive change as inevitable, to environmental determinism, with climatic change and adaptation as its major

components, to Marxist perspectives of social conflict and dominance as driving change, and, more recently, to the role of individual actors and social agency – among many others (Trigger 1989). From a methodological point of view, advances in radiometric techniques and stratigraphic excavation have allowed archaeologists to measure and map these processes with a greater degree of control and confidence both on a micro and macro scale. However, on a theoretical level, amidst the many debates of the last few decades, such as whether change should be modelled on a large scale, as long-term historical processes, or as a series of short-term lived events, or whether social change follows unilinear or multilinear directions, is accretive or abrupt, repetitive or discontinuous (G. Bailey 1981, 1983, Childe 1942, Cherry 1983, Dunne 1980, Knapp 1992, Renfrew 1973, Trigger 1989), little attention has been paid to the complete arbitrariness of such new ‘beginnings’.

Connerton has argued that the absolutely new is inconceivable in the sense that it, almost invariably, ‘contain(s) an element of recollection’ (Connerton 1989: 6). The ability to recollect from the past, memorise for the future and, more importantly, the capacity to conceive of means to share these memories with others constitute some of the most fundamental characteristics of human cognition. Through memory, past, present and future are meshed in complex relationships, transcending time and collapsing the illusion of its strict linearity. Our conscious or chance encounters with our personal, immediate past as well as with the ‘records’ of our predecessors give rise to the stories of our individual, unique biographies in relation to a larger social history (Adam 1990, Ingold 2000b). Hence, as Connerton says the notion of a beginning ‘has nothing whatsoever to hold on to; it is as if it came out of nowhere.’ (Connerton 1989: 6). In his book *How Societies Remember* he shows that even in the most radical departures from the past, like in the case of the French Revolution, there is a ‘historical deposit’ that needs to be referenced in order for the new order to be felt (Connerton 1989: 6-13). Recollection exemplifies the fact that the human mind operates within existing frameworks of meaning that stem from the past and which, potentially, transcend the lifetime of individuals and generations. While some pasts are more persistent than others and some events or material forms are more ‘memorable’ than others, all individuals and groups operate within these existing frameworks, myths, preconceptions, dispositions and habits that originated in the past. The ‘mnemonic’ practices and the media, especially in the form of architecture, used by individuals and societies, in prehistory, in order to make the past part of the (prehistoric) present is what this thesis takes up as its central theme. The starting point is the simple observation that

continuity and discontinuity are closely tied to the workings of memory. Since both these notions imply time as duration, one could say that continuity depends upon successful transmission of memories across generations, whilst loss of information and forgetting in the process leads to reinvention and change. It follows that the codification of information, hence the modes and technologies of transmission, play an important role. Nevertheless, this is too simplistic and monolithic, conflating a complex mental and social phenomenon with technological means and progress. One of the aims of this thesis is to gain a better understanding about the variable processes of memory and, more importantly, their social and historical context by taking into account advances in other disciplines before attempting to extract information from the archaeological record (chapters 3 and 4).

Normally, when archaeologists talk about sociocultural continuity or change, they refer to two opposing notions. The equation of the former with conservatism and the latter with progress does not make matters any easier¹. However, continuity manifests both tradition and innovation and under certain circumstances can appear to be 'flexible and adaptive' while in others 'persistent and self-replicating' (Smith 1982: 127). But, perhaps more importantly, continuity is the product of human perception and not an easy concept to scrutinise from an observer's point of view. Archaeologists as distant observers, unavoidably, tend to classify sociocultures according to a set of variables where behaviours can be seen as normative or deviant. This is true for example in the case of the well known neo-evolutionary classification of societies to bands, tribes, chiefdoms and states where a set of variables is defined and each stage is marked according to their degree of deviation from the norm. Hence, 'our perception of the consequences of a set is thus reinforced by our belief that such a set exists' (Smith 1982: 128).

Approaching continuity and change from the perspective of what and how societies and individuals remember and forget presents us with a unique opportunity to challenge certain assumptions about the totality of social phenomena and the rigidity of imposed dichotomies and analytical abstractions. This is mainly because the process of memory and transmission involves 'forgetting' as much as it does memorising and similarly requires persistence of the past as much as transformation and interpretation. Absolute replicability,

¹ An idea that was implied by earlier theories of unilineal evolution (Trigger 1989). More recent theories, however, reject directional social progress. Theories of punctuated equilibrium and social complexity, for example, incorporate ideas of non-directional trends in any given society. They recognise that beyond the general tendency of social systems to increase in complexity there are other driving forces such as interaction and diffusion of innovations (Trigger 1989). Also, approaches to the perception of social time include ideas of non-linear time in many sociocultural systems (Adams 1990, Turtzky 1998, see also below *note 2*, p.7).

therefore, would not be possible. The transmission of memories is not mechanical and it is not to be confused with biological reproduction. Social and cultural reproduction involves the socialisation of children into pre-existing frameworks of a cultural logic, myths and stories, commemorative activities, ritual enactments of prototypical events and material markers. Nevertheless, none of the above will always achieve accurate replicability, even in cases where formality or permanence through ritual or monuments are attempted (Ingold 2000b).

With these observations in mind, we can begin to address the question of how certain elements *were perceived* to be continuous or discontinuous, traditional or innovative, instead of rationalising change according to our own preconceptions. This needs a research approach that is, in effect, cognitive in nature. It is true, however, that to a certain extent any attempt to deal with ancient perception and cognition in sociocultural environments that we are not familiar with and have no direct access to will be conjectural to a large extent. This goes to the core of the debate regarding the objectives of cognitive archaeology and its feasibility. Renfrew maintains that archaeological enquiry that is concerned with the ancient mind is categorically *not* about entering the prehistoric mind but about the general processes that govern behaviour from a scientific and objective viewpoint. This cognitive-processual method is opposed to the more empathetic nature of symbolic or postprocessual archaeology, although Renfrew recognises the overlap between the two positions (Renfrew 1994, 1998). In this research, I approach the subject of memory and its implications in sociocultural continuity and transmission as a multi-layered phenomenon. This is not to deny that as a mental attribute it is subject to the general processes that govern human higher cognition, but to combine it with definitions of memory as a social activity that is tightly linked to the practical engagement of people with each other and the material world and that is contingent upon specific sociocultural and micro-historical circumstances (Garro 2001, Ratner 2001, Vygotsky 1978, Bartlett 1932). In turn, it is not within my aims to construct an abstract model of cognitive behaviour in prehistory or a chronological scheme of cognitive stages and thresholds (*cf* Donald 1991, 1998, 2001, Mellars and Gibson 1996, Mithen 1996, Renfrew 1998). My aim is to simply pursue the 'subsidiary narratives' in the archaeological record, aspects that exhibit elements of recollection by remaining constant and relevant while other facets might be undergoing change (Pluciennik 1999: 655). This is to say that while research on evolutionary or long-term social and cultural change usually focuses on a central theme (or prime movers), like modes of economic production, power

structures, technology or stylistic change, the objective of the present thesis is to focus on issues that concern the survival, or rather the commemoration, of certain elements which maintain a connection to the past in some form or other and are preserved in individual and/or social memory. For example, remembering as signifying continuity can take many forms; locational, ethnic, political etc. without one overshadowing the other. This means that certain identities can persist while others disappear and that this will be debated and negotiated within the society in question (Appadurai 1981).

Finally, in order to be able to tentatively identify archaeologically the various expressions of memory and the mnemonic modes that people used to actively reference the past in prehistory, we need first to slightly shift the focus from studying what changes to observing what survives. Concurrently, in order to be able to demonstrate that in practice, we need to reconsider the way we think about certain well established concepts in archaeology concerning mainly the following two; the patterning of the archaeological record and the construction of archaeological narratives. These issues are discussed below as a way of introduction and will be further explored as part of the methodological framework.

1.2 Time-Scales and Narrative Structure

One of the main characteristics of the remembering process is that it is expressed and transmitted as a condensed narrative and a highly selective one, rather than an accurate representation. It differs fundamentally from the historical narrative in that events, persons, and dates often appear in a non-sequential form. Although recounting one's past, by definition, involves storytelling, the structure of the story need not conform to rules regarding direction of the plot (Casey 1987: chapter 6). Memory contains elements of interpretation rather than reconstruction and at times such experience leads to 'rewriting' the self (and groups) anew (Freeman 1993, Kotre 1995) as much as safeguarding the endurance of past forms. Reconstructing that experience in an objective form is thus a difficult project, whether in prehistory, the historical past or the present. Memory, unlike written history, is an incomplete project, continuously shifting in perspective and purpose (Lambek 1996: 242-3). What we get when we look backwards is always a 'past imperfect' (*ibid* 1996: 242). In recent years, the study of memory has preoccupied historians, in particular the relationship between reconstructions of social memory and historiography

(Bourguet, Valensi, and Wachtel 1986, Burke 1988, Hutton 1993, Le Goff 1992, Nora 1992b, 2001, Ricoeur 2004, Terdiman 1993). Memory and history are two very different ways of gaining access to the past (Lowenthal 1985). Memory involves revision of the past and in effect it denies its very 'pastness' by claiming its continuous presence. History is the linear reconstruction of 'closed' events that is told objectively without attaching any emotional significance to the past or trying to mythologize it² (Misztal 2003: 99). This difference is captured in Nora's seminal analysis of the places of French memory (Nora 1992a). He asserts there that *lieux de mémoire* – sites, places, emblems, monuments 'where memory is crystallised, in which it finds refuge' exist because there are no '*milieux de mémoire*' - settings in which memory is a real part of everyday experience (Nora 1992b).

These observations pose a real problem to an archaeological exploration of memory and may be why the study of memory in archaeology has been largely ignored, although, notably, this is rapidly beginning to change. The tentative and fluid character of memory clashes with the painstaking attempts of archaeologists to reconstruct the past as accurately as possible. Even when the emphasis is put on interpretation and multiple meanings under the postprocessual agenda, the painstaking delineation of stratigraphic sequences and consideration of post depositional processes still constitute the most valuable tools. However, the operation of memory in unidirectional time makes it almost impossible to incorporate it in chronological sequences that order all the uncovered 'events' within a before and after framework. In this respect, archaeologists are more closely aligned with historians in their quest for the reconstruction of an ordered past based on chronologies rather than the prehistoric 'rememberer'.

The postprocessual critique directed mainly at the processual prescriptive explanations modelled on the hard sciences has highlighted the importance of the presentation of archaeological results and the responsibility of archaeologists not just as excavators but also as writers of the past (Carman, 1995, Terrell 1990, Tilley 1990, 1993). Particular attention has been paid to the construction of narratives. Narrative is defined as a story with a beginning, middle and end and with a coherent plot, events and characters (Hodder 1995, Shanks 1995). According to Ricoeur's influential phenomenological approach, narrative is not only a textual form but also an elementary aspect of human

² Although postmodern approaches to historiography have criticised the rigid construction of history as a finished project and have emphasised the role of the individual historical agent, the subjectivity of history writing and the multiplicity of narrative structures (e.g. in history Ricoeur 1984, 1988, in sociology Giddens 1979, 1981, in archaeology Hodder 1995, Terrell 1990). Moreover, postmodern philosophers have rejected the determination of history by metanarratives and have stressed the particularities of histories (Ricoeur 1988: 103-4).

experience and it is how we grasp the duration and temporality of events (Ricoeur 1989). The narrative structure of events and biographies is closely related to temporal frames and in particular human time. 'Time becomes human time to the extent that it is organised after the manner of a narrative' (Ricoeur 1988: 3). Life is perceived as a series of interwoven stories with beginnings and closure, but also with repetitions, continuities and changes (White 1973, Hodder 1993, 1995). Pluciennik (1999) notes that although in literature and film for example, the plot can be presented in non-sequential form, with flashbacks, implied biographies and condensed narrative lines, archaeological study of long-term change in particular with beginnings, transitions and endings are presented in a very different way, namely in a linear (irreversible) sequence. Furthermore, the periodisation of prehistory following the Three Age System gives an illusion of clear-cut boundaries between different periods based on technological progress. Often, the structure of archaeological narratives is dictated by the objectives of various metanarratives, such as social evolution or neo-Darwinian models. Such implicit frameworks and grand narratives order the material and past societies in such a way that the *telos* of progress of history is judged as the present state of society in which the author lives, therefore it constitutes the measure by which the past is ordered (Pluciennik 1999: 661). For example, technologies of memory progress from orality to writing, to libraries, to printing and finally to computers, the latter being the most efficient means of information storage and one that provides the prevalent model for human memory, as we shall see (chapter 3).

The periodisation of prehistory along an axis of linear time creating therefore 'frozen realities without time or temporality' (Adam 1990: 4), narratives about collectivities with no past, just goals usually equated with a problem-solving behaviour has been repeatedly criticised in the social sciences. A line of research has recently brought the juxtaposition of human and measured time in archaeology (Bradley 1991, 2002, Gosden 1994, J. Thomas 1996). It has been recognised that abstract, measured sequences do not allow us to explore in depth the rhythms of social life in the past nor do they take account of the active involvement of agents with their histories. Furthermore, the neglect of the multiplicity of experienced, lived time at the expense of a single global time provided by the mechanistic clock has ethnocentric connotations as it imposes a Western, capitalist, view of social life that separates the private from the public domain, and dwelling from commodity (Ingold 1993, 1995a). These issues have been central to recent social theory and anthropology (Adam 1990, Baert 1992, Gell 1992, Giddens 1979, N. Thomas 1989) and have

started to influence archaeologists by questioning the construction of monolithic, linear narratives (G. Bailey 1983, Gosden 1994, J. Thomas 1996, Bradley 1991, 2002, Fabian 1983, Gosden and Lock 1998, Shanks and Tilley 1987). Although they recognise that 'past, present, and future meet in complex forms, such that the present is only given meaning through retaining elements of the past and anticipating the future' (Gosden 1994: 2) they do not explicitly tie the workings of memory with the conception and use of human time in the past (with the exception of Bradley 2002). This is perhaps because one of the major concerns that has been associated with postprocessual theories in particular, is with archaeological narratives as cultural production in the present and with the 'indeterminate and shifting meanings (of the past), subject perhaps to the desires and interest of the present' (Shanks and Hodder 1995: 30). The focus is then more on the presentation of the past, the different genres of archaeological writing (Bapty and Yates 1990) and less on similar concerns in the actual past. Bradley (2002) however, mentions that prehistoric people would have had the same difficulties with interpreting the material remnants of their predecessors and their narratives would have been subject to the same shifting meanings.

Finally, another related issue that is more pressing here has to do with the time scales of analysis and with the presentation of the evidence accordingly. Braudel's well known temporal structures have been extensively used in archaeological narratives. Braudel distinguished between three levels of historical change: the *histoire éventuellement*, which refers to events and individuals, the *moyenne durèe* describes the socio-economic and political structures, and the *longue durèe*, the history of the relationship between human populations and their environment (Braudel 1972). The latter was clearly privileged by Braudel and has had the most impact in archaeological theory (papers in Bintliff 1991 and especially Knapp 1992 for applications and critical discussions). A criticism of Braudel's temporal rhythms of historical change is often the fact that agency and action are neglected, therefore individuals appear to be helpless spectators of change rather than active contributors (Last 1995). The same neglect was detected in studies of long-term change that are usually associated with environmental adaptation and cultural ecology. As Bailey explains, the underlying notion of time there is that the present should be explained in terms of the past as large-scale historical processes. As a reaction to this model, 'internalist' theories of time were put forward, where the past would be 'humanised' and reconstructed on the basis of present concerns, as a series of 'present moments' (G. Bailey 1983: 166). The former works with long-term spans, the second with short-term ones. Because of the

different resolution, long-term approaches focus on regions, social structures and cross-cultural comparisons, while shorter time spans emphasise smaller spatial and social units, such as communities, gender, class etc. The position I am taking in this thesis and for the purposes of my specific research questions combines elements of both and favours a **multi-scalar approach**. This is more appropriate in a study about continuity of the past in memory for the simple reason that, in remembering, the particular past that is being referenced can be within one's lifetime or more distant, to include several generations, or very distant such as ancestral myths. In addition, the ways that memory is articulated and transmitted ranges from ephemeral, modest or hidden to material, monumental and permanent that can start and end their life in 'everyday' domestic contexts but can also be inscribed in the landscape leaving behind a legacy for the future.

1.3 Archaeologies of Memory

Ingold has argued that the practice of archaeology itself is a form of *dwelling*, not substantially different from that practiced by prehistoric people (Ingold 1993). The similarity lies in that both the archaeologist and the native dweller perceive the landscape as 'an enduring record of – and testimony to – the lives and works of past generations who have dwelt within it' and for both, despite the time distance, 'the landscape tells – or rather is – a story.' (*ibid* 152). In this sense excavation and interpretation of a *re-membered* past are in themselves acts of remembrance on the part of the archaeologist. Archaeology, therefore, is a perfect example of how the past survives into the present and it could be considered as a kind of special 'mnemonics'. There are various stages where this is fully realised; encountering a site that is considered 'ancient' through survey or other visible remnants on the ground, excavation, use of several reminders, such as notebooks, forms and labels, formal recording, databases, photographs; then proceeding to the next stage of interpretation, consulting all the above recorded information, writing reports, but also conservation, museum display and the declaration of the site as an ancient national monument. The production of memory for the present through excavation and heritage management and their role to the formation of national identities of a shared past have been widely discussed (Lowenthal 1985, Schnapp 1997, Skeates 2005, Zerubavel, 1995, papers in Hodder 1992, Meskell 1998). However, extending similar concerns to the past is a much more recent endeavour and less popular compared to the input of other disciplines to the

subject. This is slowly beginning to change and a number of important studies have appeared (e.g. Alcock 2002, Bradley 2002, Holtorf 1996, 1998, Rowlands 1993, Watkins 2004a, papers in Williams 2003, Van Dyke and Alcock 2003, Renfrew and Scarre 1998). Of course, archaeologists have consistently explored related areas – e.g. ancestors, commemorative rituals, monuments, landscape, social reproduction, time and history - without, however, engaging in a direct way with the specific processes of memory in operation and with debates that take place in other disciplines. Therefore, this is not an area of archaeological inquiry that has an established status and has consequently a battery of methodological approaches and practical applications: for example ‘the archaeology of death’ or ‘the archaeology of space’. Ammerman, in his review of an edited volume by Van Dyke and Alcock (2003) entitled *Archaeologies of Memory*, notes the curious absence of similar titles in archaeological literature and ponders as to the difficulties of conveying such complex and vital notions in the rigid academic writing style in a way that they do not lose their meaning and links with experience (Ammerman 2002).

With respect to prehistory, the difficulty lies in the lack of written documents and technologies that are specifically designed to deal with the storage of information. Although Renfrew (1998) has noted that other means of symbolic communication were in existence in periods before writing, there is still the tendency to view oral traditions as unreliable, unstable and of limited value. Still, prehistoric people, despite the lack of writing, were by no means memory-challenged and the archaeological record testifies to a wide range of commemorative practices from monument building, ritual enactments and the veneration of ancestors to chance encounters with the past through excavation either for the purposes of looting, building construction, or ceremonial re-openings of tombs. The repeated use and reuse of artefacts, structures and entire landscapes reinforce memory and continuity and give personal and social identities content and force. Questions about not only what meaning to attach to past remains but also in what way to incorporate these into the present would have been a reality. The decision on their part to opt for presentation, reuse, conservation, destruction or discard of these traces would have been based on social, cultural and historical factors just as today, for example, the meticulous preservation of cultural heritage as an emblem of remembering a shared past is highly valued as an important element of national identities. The survival of the past would have been integral in the social order and the evocation of mnemonic modes to retain the memory of it would have been very important. So, clearly there is no reason to think of prehistoric societies, or

living ones for that matter, as either unstable or primitive. As will be discussed later, it is confusing to equate memory with memorisation and material culture with mechanical information storage. A growing number of prehistorians have recently attempted to go beyond the cumbersome oral/written distinction and have explored the formation of mainly collective memory via its material traces in the landscape. Although it is not nearly as popular as the issues surrounding cultural heritage in contemporary society and the importance given to the role of archaeological discoveries and writing as cultural production, the 'past in the past' approach is continually expanding as a rich source of interpretation of prehistoric histories (e.g. Gosden and Marshall 1999, Bradley and Williams 1998). The thematic of this thesis is a contribution towards this direction by building on previous works on the relationship between memory and material culture in pre-literate contexts and addressing certain issues that might have been overlooked in favour of others in the archaeological literature of memory. In particular, I want to explore in more depth the relationship of remembering and forgetting with materiality and ephemerality and move the discussion from monuments and inscription to more mundane contexts, such as houses and communities, as well as to less visible or 'loud' statements about the past such as domestic architectural elements, concealment, abandonment deposits and portable objects.

1.4 The Patterning of the Archaeological Record

The feasibility of studying what, in effect, has to do with cognition and how the human mind interacts with the material world in order to trigger memory, in an area like prehistory, has been a matter of contention. It is true that our attempts are flawed by major difficulties that concern access to the past. We do not have the written documents of the historian or the informants of the anthropologist. We have to rely on the archaeological record alone. Cognitive research was dismissed as 'palaeopsychology' by the proponents of New Archaeology in the 1960s and 1970s (Binford 1972: 178). After all, 'the soul leaves no skeleton' (Higgs and Jarman 1975: 1). This view accords well with the early definition of the archaeological record as a fossil and of archaeological inference as following a deductive-nomological formal logic (Patrik 1985: 44-48). Thus, the structure of artefact assemblages on the ground reflects the extinct cultural system, allowing archaeologists to make inferences about past behaviour: there is a direct, causal connection between the excavated materials and past events (Binford 1964). Furthermore, viewing the archaeological record as a

fossilised imprint implies that there is a physical recording connection 'which makes the effect an unambiguous indicator of its cause' (Patrik 1985: 45). A skeleton, for example, is a clear indicator for a body.

Schiffer, however, argued that the archaeological record is not an accurate reflection of the past but the patterning of the record is the result of a series of complex processes that not only have distorted the assemblages but also, in some cases, can exhibit a patterning of their own (Schiffer 1985). He then developed a set of criteria for identifying the specific depositional and post-depositional processes in operation in specific contexts (Schiffer 1983, *cf* Binford 1981). Schiffer distinguished between the *systemic context*, which is of interest to archaeologists and describes the behavioural system, and the *archaeological context*, where artefacts have ceased to interact with the living system and have been deposited in the ground. Certain cultural formation processes are responsible for preserving items in the systemic context, such as reuse and recycling, whilst others, such as discard and abandonment are responsible for depositing artefacts. He makes, therefore, a second distinction between the former as forming the historical record and the latter as creating the archaeological record (Schiffer 1996). Despite all these complex processes, however, he is optimistic that once the formation processes have been adequately accounted for, and once we have understood how materials came to be patterned in a specific way, we can begin to 'decipher' the past cultural and behavioural system.

The view of the archaeological record as a fossil that has stopped in time and the search for universal laws that govern its patterning have been criticised as creating a false distance between past and present, between a static 'lifeless' record and a dynamic system (Patrik 1985, Hodder 1985, 1986) and between objects that either participate in culture or are part of nature (J. Thomas 1996: chapter 1). An alternative view is the textual model, put forward by postprocessual archaeologists that supports a different definition of the archaeological record. Influenced by semiotic and structuralist approaches in literary studies, this approach promotes the view that the archaeological record is structured like a text and that there is therefore an underlying 'grammar' that affects its patterning. The comparison of material culture with text implies that because meaning is encoded in material objects, like in words, that meaning can be 'read' by archaeologists (Hodder 1986, Moore 1986). Hence, as Patrik notes, in the textual model the connection with the archaeological record is not a physical recording but one of signification (Patrik 1985: 41). However, there is not a straightforward connection between signifier and signifying. As in

language, material culture can take a multiplicity of meanings, ambiguities and metaphoric connotations (Tilley 1999). It is difficult to imagine how archaeologists would be able to 'translate' these adequately and accurately (Barrett 1988). Moreover, the textual analogy does not manage to escape the notion of a static archaeological record that is left behind for us to decipher, whether the code is formation process or syntax. Inevitably this means that interpretation or translation of past meanings is closer to the current social and intellectual context of the archaeologists rather than to the reality in the past.

What is of interest here is the continuous relationship between people, material culture and their contexts of deposition. We need an approach that is more flexible and allows us to think of the archaeological record as something that is both physical and enduring because it creates constant associations and references to the past and will continue to do so indefinitely. This unbroken relationship is exemplified by the contribution of archaeologists to the 'biographies' of objects and their pivotal role in the formation of shared memories in the present. In other words, what survives (in the past, present or future) is not accidental but the result of what is chosen to be committed to memory, a kind of paying tribute (Pollard, 1999, Bradley 2002, Hill 1995). Bradley has argued, along similar lines, that the patterns that archaeologists observe on the ground must have resulted from actions that were formalised and repetitive. In other words 'those very actions were ritualised' (Bradley 2005: 209, also Walker and Lucero 2000, W. Walker 1995, 1999, LaMotta and Schiffer 1999). This is a logical observation if we consider that the archaeological record is nothing else but the result of many different behaviours of many people over many years, which in reality does not produce clear patterning but represents 'the chaotic patterns of daily life' (*ibid*: 208). Only the actions that are the result of purposeful, 'ritualised' or commemorative actions could produce some form of recognisable patterning, although interpreting these patterns is more difficult. Moreover, the interaction between people and material things is not, and has probably never been, one between dynamic and static entities but one that involves new encounters with the 'accumulated histories' of material culture. This is how things acquire permanence and meaning and how messages and cultural traditions are transmitted. It is futile, therefore, to have such absolute categories as historical and archaeological record, cultural and natural, living and fossil, residues or functional. Hence, whilst Schiffer uses the 'life history' concept to illustrate the sequence of behaviours with respect to material culture, he still sees artefacts as starting their life with manufacture

– becoming ‘cultural’ – and ending when they are deposited in the ground – ‘that interact only with the natural environment, such as those in a dump’ – (Schiffer 1996: 4).

1.5 Place, Architecture and Memory: An Intimate Relationship

The way references to the past are spatially represented in the landscape and the way that especially monumental architectural or natural forms assume the role of material expressions of cultural memory constitute a valid and methodologically feasible access to the mnemonic practices of prehistoric societies. This has been demonstrated in a number of recent works within the framework of cultural geography and landscape studies, where memory of past events, but also ideologies, cosmological beliefs and mythical traditions are physically materialised and fixed in the landscape (Alcock 2002, Bradley 1998, 2002, Dietler 1998, Edmonds 1999, Keates 2000, Tilley 1994, 2004, also papers in Ashmore and Knapp 1999, Bradley and Williams 1998, Van Dyke and Alcock 2003). The preservation, use and re-use of such ‘inscribed’ landscapes are interpreted as attempts to establish continuity in the social landscape and to forge a sense of collective identity based on an enduring historical presence of a shared past; a practice that has had a continuous historical presence in Western nationalism and continues today as the accentuated importance given to heritage sites show (B. Bender 1992, Lowenthal 1985, Schama 1995, Nelson and Olin 2003). Such cultural practices of ‘signing the land’ (Bradley 1998, 2000, David and Wilson 2002) by virtue of the construction of monuments and memorials exemplify the close relationship of memory with place and architecture. Although the nature of that relationship is most obviously demonstrated through the materiality, high visibility and durability of such constructed landscapes, their performative aspect is also stressed, if more difficult to pinpoint archaeologically (Tilley 1994, Edmonds 1999, Barrett 1994). These processes have a lot to do with how memory of the past is brought forward and the way past experiences and attachment are incorporated into the spatial settings of everyday life to create ‘a sense of place’ (Feld and Basso 1996, Relph 1996, Altman and Low 1992). Places are named, talked about, lived and remembered. They are existential spaces but also cultural and social objects as well as biographical and deeply personal (Tuan 1973, 1977, Parker Pearson and Richards 1994b, Rapoport 1989, Seamon and Mugerauer 1985).

This thesis undertakes a kind of *topoanalysis* into the spatiality and visibility of memory *in place*. The places that are of interest here are houses and communities. An

important issue that immediately arises with the use of the term *topoanalysis*, a term that was coined by Bachelard (1994) in his phenomenological exploration of the experiential qualities of the house as lived space, is the question of 'visibility'. To what extent can we 'locate' memorial spaces which have not been constructed with this function in mind? In other words, to what extent can we gain access to the biographical spaces of prehistory? These issues will be further discussed in chapters 2 and 5. In this research I view houses as dynamic entities that play an active part – they are social agents themselves – in the creation of social continuity and memory of place as well as providing, from an archaeological point of view, a point of access to the way 'societies remember' (Connerton 1989). The key to understanding how architectural spaces of everyday life create a memory of place in prehistory is to approach their life histories in a way that reveal the stages of their transformation, such as construction, renovations, replacement, decay and abandonment; the relationships of their life cycles with the life cycles of people; and finally, the recognition that generations of houses and biological generations lead parallel lives (Tringham 1991, 1995, 2000, Barnes 1967, Carsten 1995, Joyce 2000).

1.6 'Housing' Memory in Cypriot Prehistory

Case studies from the archaeological record of Cyprus' early prehistory (Neolithic, Chalcolithic, Early/Middle Bronze Age) are employed in this thesis to demonstrate the methodology and interpretative framework that deal with mnemonic practices and in particular with continuity and memory of place. The selection of Cypriot material for the study of the relationship between place biographies and memory is not an obvious or ideal choice for this kind of research, since the 'success' of such an analysis rests on the availability of stratified evidence for repeated architectural practices in the same location over long periods of time. The lack of deeply stratified sites on the island in contrast with the archaeology of the same period in the Levant, Anatolia and mainland Greece is one of the characteristics of the Cypriot settlement record that set it apart from other areas in the eastern Mediterranean. Relatively small, short lived villages or, in other cases, larger and deeper sites, but where marked horizontal displacement and/or breaks in occupation are notable, constitute the norm. Hence, the perception of continuity with a society's past, in prehistory, and the variable ways of creating identities that are rooted in a particular

landscape have to be demonstrated rather than simply pointed at, given the absence of explicit materiality and monumentality of the settlements' remains.

It has to be noted that my focus is not, at this point, on explaining why Cyprus was different in terms of its social configuration, that is, why it did not follow the same paths to social complexity as adjacent areas and why the island was unreceptive to social change and the 'internationalism' of Eastern Mediterranean networks (Manning 1994, Knapp and Blake 2005, Knapp 1993, 1994, Sherratt and Sherratt 1991, 1998). Instead, questions such as why the formation of *tell* mounds and the processes of urbanisation were not part of the Cypriot social and physical landscape or what were the causes for the 'intermittent restlessness of the population' (Catling 1962: 131)³ are rearticulated, in this thesis: *how* people living in horizontal sites, the settlements of whom might have lacked what Chapman calls 'timemarks'⁴ (Chapman 1997), created 'social time', charted their ancestry and transmitted the spatial stories and memories of their predecessors? The direction that this research takes is, therefore, qualitative and descriptive rather than causal or problem-oriented. The house as a material and symbolic arena where people would have routinely or intentionally referenced or talked about the past is the focus of this study. House histories are explored as these interact with the life histories of their occupants and the wider community (Tringham 1991). From this point of view, the rich archaeological record of Cyprus offers unique insights and the island's 'domestic' landscape lends itself to an exploration of remembrance in a contextual manner.

It is important, however, that we have a strong theoretical framework and understanding of the subject, before dealing with the cultural record. The following three chapters attempt to establish how we can incorporate certain concepts into archaeological methodologies. In particular, following Casey in observing that 'memory takes us into the environing world' and that in this respect remembering is 'co-extensive with world' (Casey 1987: ix, 311) I adopt a dynamic view of the role of material surroundings in accessing or restricting memory, contra to the static normative view of material culture and technology as compressed stores of codified memory ready to be assessed and used. Thus, I wish to emphasise that the process of memory is a multi-layered mental, social, material and bodily function, operating in variable and unidirectional time-scales and directly affected by socio-

³ Discontinuity and horizontal displacement characterise not only Bronze Age settlement patterns that Catling refers to, but also Neolithic and Chalcolithic occupations (Peltenburg in Peltenburg et al 2003: 272-6).

⁴ In reference to Chalcolithic Hungarian *tells*.

cultural and historical contingencies (Hutton 1988, 1993). On a broad level the aim of this study is to show the methodological validity of the project and to highlight, notwithstanding the limitations of a problematic archaeological record, the possibilities that this line of thought opens up for interpreting ancient cognition and social action in prehistory and, in particular, for highlighting the role of the house in the creation of identity and memory in Cyprus' early prehistory.

Chapter Two

Locating Memory: Method and Theory

Beyond six rivers and three mountain ranges rises Zora, a city that no one, having seen it, can forget...Zora has the quality of remaining in your memory point by point, in its succession of streets, of houses along the streets, and of doors and windows in the houses, though nothing in them possesses a special beauty or rarity. Zora's secret lies in the way your gaze runs over patterns following one another as in a musical score where a note can be altered and displaced...This city which cannot be expunged from the mind is like an armature, a honeycomb in whose cells each of us can place the things he wants to remember.

Italo Calvino 1979, p. 16

2.1 Research Questions and Aims of Methodology

The present research focuses on the everyday landscape of communities and in particular on the more intimate settings of houses where personal and 'family' memory meets and interacts with larger and more distant elements of social memory. It also looks at the development of communities through time as generations of houses are occupied, abandoned and rebuilt. In short, this thesis represents an attempt to gain access into the heterogeneous *memoryscape* of prehistoric communities by using as its starting point two closely related analytical strategies that correspond to a horizontal and a vertical level of analysis. The metaphor of the landscape *for* memory has been used by Cole (2001, following Kirmayer 1996) to describe the organisation of people's memories at a given time, their ways of access to them and the conditioning of their future retention. It is important to note that the memoryscape of any society is characterised by what Cole refers to as 'synchronic heterogeneity', or where individual memories intersect with historical consciousness and larger social patterns. In short, it refers to

'the array of schemas through which people remember and the sociohistorical forces that draw these schemas into action and sometimes enable them to be formulated in narrative. It also encompasses the broad spectrum of commemorative practices through which people rehearse certain memories critical

to their personal dreams of who they think they are, what they want the world to be like and their attempts to make life come out that way' (Cole 2001: 290).

Here, I follow this definition of the mental memoryscape but my aim is to not 'enter' the prehistoric mind but rather to understand the spatial localisation of memories in the landscape and in particular in the lived, non-monumental contexts of dwellings and communities, where, I think, long-term, cultural memory intersects with short-term, autobiographical memory. This is supported by the fact that human memory is, in essence, spatial, whether this space is that of a house, a village, a landscape or the body. The analytical strategies that are employed here, seek

- a. to examine the **temporal depth** of activities through looking at the relations between the 'biographies' and life-cycles of places and, in particular, houses and people in the short term, that is in 'generational' time. The questions that are hoped to address here are:
 - *How did successive generations encountered and treated the remains of their immediate past?*
 - *What can the repeated, innovative or unreflective practices that are observed in the domestic architectural record over time tell us about 'how these societies remember'⁵?*
- b. To demonstrate how **micro-scale** methodologies can elucidate the relationship between domestic architecture and place. In particular,
 - *What is the role of the house in terms of its temporal and architectural expression in establishing such links with the past?*
- c. to explore the spatiality and **visual boundaries** of place (Bachelard 1964, Nora 2001, Casey 1987). In particular,
 - *In what way the spatial organisation and segmentation of communities affected how many people could interact and share the same memories?*
 - *How 'visible' were the mnemonics associated with triggering memory of the past?*

Of course, conceptually, we cannot separate the spatiality of memory from the element of time depth. The notion of place and place-memory that are of interest in this thesis point unequivocally to the interconnectness of space and time. Therefore, a horizontal topoanalysis depends upon a time depth whether this is to be found in archaeologically measurable properties such as stratigraphy and chronology, or in conjectural reconstructions of orally transmitted knowledge and myths across generations. Space

⁵ Tringham 1991, 2000, Pred 1984, 1990, Bailey 1990, Connerton 1989.

becomes place only if it has a past that is referenced in conscious and unconscious acts of remembrance. Space becomes place through familiarity, attachment and a sense of rootedness that are strengthened with the passage of time (Casey 1987, de Certeau 1984, Feld and Basso 1996, Relph 1981, Tilley 1994, Tuan 1974, 1977). Places, whether houses, villages, objects or landscapes embody accumulated histories and they acquire their specific meanings through repetitive experiences. Hence, places are both ‘horizontal’ and ‘vertical’ concepts. However, the two distinct methods will help us to **translate the products of excavation into the social practices and the sequences of action** that were performed in each case, and in the process transforming, repeating or concealing the remains of the immediate past. One way to explore this time-space relation is by employing a **multi-scalar** approach that applies the aforementioned components of analysis to a variety of spatial and temporal scales, which will allow us to make a series of **contextually informed observations** in order to present a more balanced account of how memory was formed, maintained and transformed as part of everyday life and habitual interaction with people and the material world but also the ways that this was contextualised and informed within a wider cultural memory.

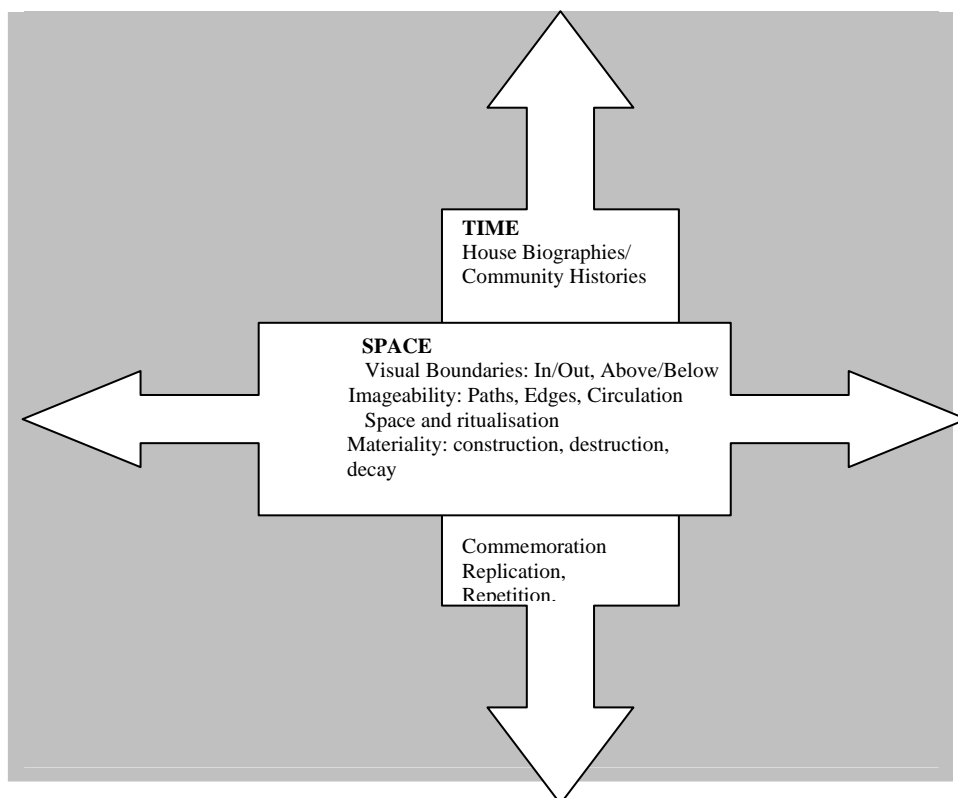


Figure 1. The role of time and space in the creation of place memory.

2.2 Places of the Mind: The Visual and Spatial Structure of Memory and the Role of Architecture

With remembering, like all other intangible cognitive operations such as emotions and imagination, we tend to give them substance through fusing them with tangible objects from the material world, effectively 'dispensing and finding sensory records outside the body in a surround of entangling objects and places' (Seremetakis 1994: 9). This is nowhere more evident than in the use of spatial and visual metaphors to describe human memory. Although for some, memory could be only compared with something as unstable and unpredictable as the weather (Lambek and Antze 1996: 22) the metaphors, however, that best capture the folk understandings of the process of remembering, and have persisted since the classical age, are, quintessentially, spatial and intensely visual. Sight was central to the ancient Greek model based on Aristotle's theories, where memory was understood as the encoding of perceptions as a copy, a *phantasma*, a kind of *eikon* (Sorajbi 1972, Warnock 1987, Carruthers 1990). The classical notion of memories as resembling images or copies of images survives in the empirical philosophy from the seventeenth century onwards; triggering heated debates between those who believed that memory represented an image from the past and those who insisted that it is knowledge (Warnock 1987, ch. 2).

Images, according to Le Goff, with their spatial and visual associations produce the 'immense hall of memory' (Le Goff 1992: 70). Architecture has indeed been widely used as a metaphor for memory. From the method of *loci* of ancient Greek rhetoricians to St. Augustine's writings, where memory resembles 'spacious palaces' (St. Augustine in le Goff 1992: 70), architectural analogies have consistently provided one of the most vivid and effective metaphors. Of course, the different analogies that have been used over the centuries conveying the many facets of memory must be seen within a historical and cultural context and especially with respect to the development of the supporting technologies, as is the case with the contemporary fascination with computer storage, as will be further discussed in chapter 3 (Roediger 1980, LeGoff 1992). Lakoff and Johnson (1980) argue that understanding how a society uses metaphors is central for an understanding of its conceptual systems and practices. Hence, we cannot place too much significance or direct relevance of Western literate traditions, particularly European, to prehistory. Nevertheless, a quick look at how we think metaphorically about remembering establishes the importance of vision, materiality and space, which is corroborated by the

findings of cognitive psychologists and environmental designers (Allen 2004). Moreover, what I particularly want to establish here is that the relationship between architecture and memory is far from a superficial analogy and it is certainly not to be reduced to the mental space of a cognitive map, but it actually illustrates how architecture interacts with the human mind (Parker 1997, Watkins 2004a, Wilson 1988).

The method of *loci* (in Latin) or *topoi* (in Greek), that was central to the classical and medieval arts of memory, relied on the anchoring of memory in imaginary spatial structures. A *locus* is 'a place easily grasped by the memory, such as a house, an intercolumnar space, a corner, an arch' (Yates 1966: 22)⁶. The architectural type of mnemonic was the commonest place system. These complex 'mental gymnastics' were described as the most efficient method of memorisation and especially useful seen in the context of ancient and medieval rhetorics where one had to memorise long speeches. In order for images of places to be memorable, they had to be carefully lit, not too bright (because they would glow) nor too dark, (because the shadows obscure memory) not too crowded or overpowering and carefully chosen/imagined. In Cicero's words

'When we see in everyday life things that are petty, ordinary, and banal, we generally fail to remember them... We ought then to set up images of a kind that can adhere longest in memory;... if we assign to them exceptional beauty or singular ugliness; if we ornament some of them, as with crowns or purple cloaks, so that the similitude may be more distinct to us; or if we somehow disfigure them... The things we easily remember when they are real we likewise remember without difficulty when they are figments.' (Cicero translated by Yates in Yates 1966: 25-26).

The Classical and medieval *ars memoriae* also included material and spatial metaphors of memory as resembling a storage room (*apotheca*), a strong box with treasures (*thesaurus*), a library with separate compartments, hives for bees or caves and inner chambers, where memories were sorted, ordered and systematised. These analogies, according to Carruthers (1990: 35-42), made it possible to visualise abstract connections and associations, crucial in memory techniques. Without them an untrained memory would resemble 'a forest without clear routes and pathways' (Carruthers 1990: 33). The memory theatres of the Middle Ages and the Renaissance continue the visuo-spatial system of associations of classical and Roman antiquity. At that time, memory training encouraged the mental construction of illustrious theatres, complete with a stage, seats, and classical

⁶ Yates (1966) has exhaustively examined the art of memory in classical and medieval times as it survives in Latin sources such as in Cicero's *De Oratore*, in the anonymous *Ad Herennium* and in Quintilian's *Instituto Oratoria*. Carruthers work (1990) is another treatise of the art of memory in the middle Ages and the effects of printing and literacy on the memory techniques of the period in question.

statues reminiscent of Roman forums. These images of theatres were considered to be so powerful and effective that they acquired a symbolic status and they even came to stand as vehicles for religious propaganda. Examples include the memory theatres of Giordano Bruno, who used them to illustrate the power of human memory, and the victory of man over nature, as part of occult, hermetic philosophy (Yates 1966); the theatres and memory palaces of Matteo Ricci, a sixteenth century Jesuit missionary, who used them as the locus for the storage of Christian theological concepts, in his efforts to convert the Chinese (Spence 1985). The relationship between theatre architecture and memory was finally materialised in the construction of wooden prototypes that Giulio Camillo offered to kings as a powerful memory device, further establishing the connection between mental constructs and concrete architecture (Yates 1966).

According to Wilson, 'architecture is a materialisation of structure and the adoption of architecture as a permanent feature of life introduces spatial organisation and allocation as an ordering visual dimension' (Wilson 1988: 61). The effectiveness of architecture as a metaphor is based on the fact that it provides the mind with significant structural framing by means of its concrete boundaries. It provides order and structure, a 'meaning-context' for future reference (Schutz 1967). It acts as external scaffolding for information and concepts that otherwise would be difficult to sustain. That way a vast amount of information is 'enclosed' within an already-structured context (Parker 1988: 148), a premise that is evocative of Aristotle's ideas regarding the main function of place, which is that of containing (*periechon*). More than that though,

To be in a place is to be sheltered and sustained by its containing boundary; it is to be held within this boundary rather than to be dispersed by an expanding horizon of time or to be exposed indifferently in space. [...] in its abiding character, place is there to be re-entered, by memory if not by direct bodily movement. [...] The very persistence of place helps to make it accessible in a way that is rarely true of a comparable unit of time or a given site. (Casey 1987: 186)

Casey further reminds us of the close relationship between the body and place memory by stating that it is only through the lived body that we can be in place at all (Casey 1987: 189). The basic idea behind the method of loci, that, in order to remember, one had to walk through the imaginary spatial structures and search for their contents, captures that relationship. It is further supported by Gibson's ecological psychology of perception where active search by movement and visual perception are inextricably related (Gibson 1950, 1979).

2.2.1 Cognitive Mapping

More recent work on cognitive psychology, neuroscience and behavioural geography supports the same connection between space and mind. The concept of cognitive mapping is a neurological model for spatial memory and describes the process of representation of environmental features in the mind. The primary brain structure involved in cognitive mapping is the hippocampus (O'Keefe and Nadel 1978). While all mammalian species probably possess some kind of spatial memory, human ability for cognitive mapping is superior judging from the complexity of representation but also from the fact that it is closely associated with communication (R. Wallace 1989, Zubrow and Daly 1998). Successful navigation in unfamiliar territories, location of resources and the ability to remember how to return to these at a later date would have contributed to the evolutionary success of proto hominids (Glenberg 1999, Allen 2004). Cognitive mapping, of that sort, is of paramount importance to our daily movements, to know what is where, but also in stabilising our mental stock of knowledge about the world. People learn the locations of objects in a place by interpreting the spatial structure of the layout in terms of a spatial reference system. Shapes and objects in the environment are encoded as spatial prototypes. They are stored in memory through visual processing as abstractions of the spatial elements that are typical and consequently all variations or new environments are evaluated and learned through the normative spatial prototype (Lloyd 1994). Cognitive maps represent a synthesis and an abstraction of past and present experiences in the environment we inhabit. These mental constructs help us collect, organise, store and recall information about our spatial surroundings. They are 'coathangers for assorted memories' (Downs and Stea 1977: 27). Our perspectives of the world, however, are not universal, but they show considerable individual differences, depended upon age, experience, culture, social factors, and individual visual and auditory capacities. They represent 'the world as people believe it to be' (Downs and Stea 1977: 4) and as they have experienced it. Moreover, spatial constructs do not just include representation of the natural or built environment but also of the social environment, thus, embedding complex information in a structured context (R. Wallace 1989).

Architectural space but also natural landmarks are important visual cues. The geographer David Lynch associates the specific characteristics of mental models of space with, what he calls, 'imageability' or 'legibility' of a place like a city or a landscape (Lynch 1960, see also Higuchi 1983 and Sitte 1965). Imageability refers to the attributes of the

environment that are more likely to evoke powerful emotions with spaces and objects that 'are not only able to be seen, but are presented sharply and intensely to the senses' (Lynch 1960: 10). Urban designers and geographers use this information to model people's decision-making processes by analysing the perceptual qualities of buildings and public spaces (Turner 2003, Penn 2003). This line of thought has been particularly associated with the work of behavioural geographers and has been criticised as bringing a somewhat constraining philosophy to human geography that adheres to a positivist framework and utilises problematic conceptual and measurement methods (Johnston 1991: 144-160).

Further criticisms, not restricted to geography, include that the concept of cognitive mapping does not account for individual or sociocultural experiences nor does it give primacy to the role of the engagement of the human mind with the environment. Ingold, for example, who opposes the concept of a mental map locked into people's heads, notes that the 'bird's eye view' that such an idea promotes, differs fundamentally from how people perceive of their environment as they move from place to place (Ingold 1993, 2000a, c). He argues that even the choice of term by cognitive scientists to describe spatial memory, that of the map, as opposed to a picture or an image is symptomatic of the affiliations of the model with Cartesian views of place and one-dimensional cartographic representation (Ingold 2000d: 223, Casey 1996). In keeping with Gibson's ecological theory of visual perception, Ingold asserts that

'It is not a view from 'up there' rather than 'down here', but one taken *along* the multiple paths that make up a country, and along which people come and go in the practical conduct of life. Our perception of the environment as a whole, in short, is forged not in the ascent from a myopic, local perspective to a panoptic, global one, but in the passage from place to place, and in histories of movement and changing horizons along the way' (Ingold 2000c: 227, emphasis original).

Similarly, archaeological perspectives on spatial cognition and memory focus on the selective advantages of spatial behaviour in early societies as well as on the symbolic technologies that were used to communicate spatial information, mainly in the form of maps, rock art and pictograms (Zubrow and Daly 1998). These one dimensional views of the world are considered to be prime examples of external symbolic storage that reduce the workload on working memory and free humans from the constraints of biological memory. The criticisms that these and similar cognitive models of memory have attracted will be further discussed in chapter 3. Alternative approaches focus on the qualities of place that materialise memories of the past but at the same time they state that these places are

malleable, contain multiple meanings and are shaped by experience and bodily practices (Bradley 1998, Bradley and Williams 1998, Tilley 1994, J. Thomas 1996, Edmonds 1999).

These criticisms, notwithstanding, the tradition of behavioural geography, and especially the work of Lynch on the legibility of environments have recently been revived in the academic literature of architecture, with influences to landscape archaeology. (Kitchin and Freundschuh 2000, Lake and Woodman 2003, Lock 2000, Stevens 2006). Advanced techniques that include visibility graphs, computer simulation of agents' movement in open spaces and elements of space syntax analysis have been applied to various situations shedding light to spatial learning, way finding and cognitive mapping. Taking into account the critiques of earlier models of cognitive mapping, these approaches have re-evaluated the merits of spatial analysis and some of them have taken inspiration from Gibson's ecological approach to perception but also from phenomenological theories of embodiment and movement to present a more holistic account of spatial memory (Turner 2003, Penn 2003, Tverski 2000, 2003, Tilley 1994). Cognitive mapping, thus, appears not to be strictly adhering to metric axioms but has been found to be largely 'topological' in nature (Penn 2003), whereas the role of the body and its axes have also been recognised as paramount (Tverski 2003). In short, recent research on the relationships between environment and behaviour or between space and mind has developed more sophisticated methods in an attempt to address earlier criticisms with regard to the positivism of spatial analysis, reconciling more traditional methods with recent concerns about the qualities and subjectivity of place on one hand and the social and cultural factors at work on the other⁷.

2.2.2 The qualities of *place*

The relationship between memory and architecture was briefly sketched above with the view to substantiate the argument that remembering extends beyond the mental realm and merges with the spatialised material world. Memory, in fact, is so closely integrated with place that they become mutually dependent upon one another; the former acquires a material substance, a locus, whilst the latter draws its meaning and its timeless qualities.

⁷ There is a vast literature in spatial archaeology where similar trends can be traced from the earlier models of 'mapping' space within the processual tradition employing a range of mathematical models to spatial analysis e.g. Hietala 1984, D. Clarke 1977, Carr 1984, Hillier and Hanson 1984, Foster 1989; to interests in social relations as reflected in spatial arrangements including households, gender, power and domination, e.g. Flannery 1972, Kent 1984, 1990b, Shanks and Tilley 1988, Wilk and Rathje 1982; to approaches that stress the symbolic aspects of space, e.g. Moore 1986, Hodder 1990, Donley 1982; to the more recent tradition of landscape archaeology with a focus on phenomenological approaches to space but also on social structures, e.g. Barrett, Bradley and Green 1991, Tilley 1994, 2004. For reviews see: Ashmore 2002, Lawrence and Low 1990, Parker Pearson and Richards 1994a, Bailey 1990.

Materiality interacts with the human mind, as we have seen, in complex ways; constructing in the process powerful symbols that stabilise social memory and as Nora argues, the purpose of *lieux de memoire* is 'to stop time, to block the work of forgetting to immortalise death to materialise the immaterial' (Nora 2001: 19). This process is always subject to alteration and re-interpretation. In other words, *lieux de memoire* 'only exist because of their capacity for metamorphosis, an endless recycling of their meaning and an unpredictable proliferation of their ramifications' (Nora 2001: 19)⁸. Places of memory are also easily individualised, not necessarily in the form of design or form but in the sense that they are lived spaces that are walked on, seen, sensed, imagined and talked about. Such places are expressions of self reflection and identity; they are dynamic and evolving; they are grounded on lived relationships (*sensu* Heidegger's concept of 'dwelling', 1993). More than that, places have their own biographies and temporalities. Place describes a process rather than a mere physical setting, whereby space is socially produced according to certain rules and norms and constantly reproduced and transformed by routine social practices carried out by individuals (Pred 1984, 1990, Giddens 1979, 1984, Bourdieu 1973, 1990).

Place is not a matter of form, in architectural design terms, nor is it a matter of distance, in cartographic terms. Bachelard notes that the places that are linked to our intimate lives can be revisited at any time by means of our imagination. There, one finds that 'the passage of time is often resisted and that revisiting space can allow the past to be reanimated as it was in a sequence of fixations in the spaces of the being's stability (Bachelard 1994: 9). For Basso (1996), it is the process of 'interanimation' that captures best the qualities of place, a dynamic and reciprocal process that describes the ways that places bring to the fore the ideas and feelings of persons that are situated in those places. The movements of the process of interanimation are both 'inward toward facets of the self' as well as 'outward toward aspects of the external world, alternately both together' (Basso 1996: 55).

These observations bring us to a very different way of approaching the spatiality of remembering that is of interest here. It is different from cognitive science, which, despite its explicit 'topographic' language – access, storage etc. that is used in scientific definitions of biological memory, the relationship between place and memory has been largely overlooked by cognitive psychologists (Casey 1987: 180). It also diverges in significant ways

⁸ Note that Nora (2001) talks primarily about archive memory, records of the past in the form of permanent memorials, official archives and public records (Carrier 2000)

from a spatial science that maps relationships in terms of distance and evaluates architecture in terms of form. The approach that gives primacy to the qualities of space has its roots in humanistic geography and it largely encompasses phenomenological and existential perspectives. If cognitive scientists have indeed ignored the role of place in remembering, 'humanistic' geographers have discussed it as being at the core of all human experience (Relph 1981, Tuan 1973, 1977, Feld and Basso 1996, Buttner 1978). Yi-Fu Tuan (1977), one of the most influential humanistic geographers, sees place as the progression of undifferentiated space to places endowed with meaning and values through human experience. It is place, thus, and not space, that accumulates a variety of experiences, memories and events that have marked one's life. Space becomes place when we become familiar with it through repetitive experiences. It comes to be *known* as here, as opposed to there, only when people have actually lived in it. Consequently, place cannot be known in advance (Basso 1996) nor can it be described as empty space. Relph, whose name has been associated with phenomenological explorations of place and lived experience says that 'place experiences are necessarily time-deepened and memory-qualified' and are reconstructed in our memories and affections through repeated encounters and complex associations' (Relph 1981: 26). Experience of place is paramount in any exploration of human geography since, to be deprived of place 'is to be denied the basic stance on which every experience and its memory depend' (Casey 1987: 182); to be placeless is to be disoriented and disembodied. Place localises, situates and anchors memories giving them duration and fixity, but also 'a name and a local habitation' (Casey 1987: 184-185). This line of thought opens up immense possibilities to study the relationship between memory and space in a qualitative manner and it provokes us to probe into the perceptual qualities of space and to acknowledge that what people make of *their* places cannot always be captured by the Cartesian logics of quantifiable space. The realisation that the latter has been developed within a capitalist system that regards place and landscape as something that can be measured, controlled and exploited (Tilly 1994: 26-7, Cosgrove 1984, Gieryn 2000) and that the subject-object opposition that is part of the same tradition should not be imposed onto pre-capitalist societies (Entrikin 1991) is a very important lesson for archaeology. However, the reverse argument also holds truth; that the resurged popular and academic interest in *place* as well as in the *materiality* and *embodiment* that *place* implies, reflects the postmodern reaction to the effects of capitalism, technology and globalisation, with their effects of 'time-space compression' logic (Harvey 1989) and the dehumanisation of place as

it becomes increasingly detached from memory and experience. These reactions are evident in the green movement, in the obsession with preserving the past and in scholarly writings about the urgent need to humanise place again (Lowenthal 1985, 1996, Tilley 1994, 2004, Relph 1981). A number of archaeologists within, especially, the field of landscape archaeology, have been inspired by such approaches and have attempted to incorporate into their accounts the perceptual qualities of place as it was lived and acted out in the past (Tilley 1994, 2004, Tringham 1995, Barrett 1999, Thomas 1996). Hence, terminologies like 'inhabitation' (Barrett 1999), 'dwelling' (Ingold 1993), 'embodiment' and 'corporeality' (Tilley 2004, Hamilakis 2002), ideational landscapes (Knapp 1999), among others, have firmly established their ground in archaeological theory.

2.3 'Locating' Memory and Place in the Past: Difficulties and Possibilities

The subject and indeed the whole viability of this research is based on the premise that it is possible for us to reflect on the qualities of places and to suggest how these shape and are shaped by the various biographical and social memories of people in the past. In theory, this can be achieved through looking at the material traces of the past, and through discovering the spatiality that has grounded or obliterated those memories. It opens up possibilities to write an archaeology that is *inhabited* (Tringham 1991, Barrett 1999). In practice though, what we are really discovering and 'reading' are not the material remains *per se*, but the static archaeological record, as this has been excavated, understood and published by various archaeologists. Before I turn to the specifics of the analytical strategies employed in this thesis I wish to briefly contemplate the practical difficulties inherent in the analysis and presentation of archaeological data in a way that does justice to the inspired philosophical approaches that relate place, material culture and memory (Relph 1981, Tuan 1977). In other words, it is difficult to combine the 'reality' of working with archaeological data, such as two-dimensional site plans, incomplete excavations, decontextualised artefact illustrations and dubious radiocarbon dates with the subtlety of experience, perception and qualities that characterise mnemonic places without, in effect, trivialising their importance. Equally, it would be flawed to impose uncritically our own very specific notions of place, home and biography onto prehistoric societies. The difficulties in approaching these issues are partly due to the fact that we are dealing with two concepts, place and memory, that are elusive, difficult to define and totally resistant to be revealed in written academic language. It is not

surprise then that many scholars find it easier to describe place and memory by what they are *not* rather than by what their concrete characteristics are; memory is *not* history, it is *not* solely in the mind, it is *not* biology; place is *not* space, it is *not* a boundary, it is *not* just a setting. But it is also difficult not to lose sight of the fact, while describing and analysing the physical remains, that these physical settings, whether houses or landscapes, were once the centre of people's worlds, they were lived in and sensed in a way we cannot fathom today and, more than that, they were active agents interacting with people's biographies and encompassing their social memories.

Samuels (1979), a humanistic geographer, identifies the problem between subjectivity and objectivity and distinguishes two categories of landscape: landscapes of *impressions* and landscapes of *expressions*, the former describing an outsider's view of the landscape, whilst the latter contains the authors of the landscapes *in* their context. He suggests that a more fruitful way to overcome the various dualisms would be to incorporate both of these in our accounts and to examine the biography and authorship of the landscape recognising that it is people who are responsible for the way landscapes are constructed and perceived and not some abstract or unreflective forces. He further proposes to study closely all the evidence that they have left, whether direct or indirect, that would reveal the reasons for their actions. In a similar vein, and much later, various archaeologists, predominantly within the context of British and North European prehistory and mainly with regard to monuments, have produced innovative presentations and narratives of how landscapes were inscribed, perceived, taken part in relations of power and remembered for a long time (e.g. Bradley 2002, Gosden 1994, J. Thomas 1996, Barrett 1994, Holtorf 1998). Amongst these, Tilley's phenomenological approach has been particularly influential in archaeology (1994, 2004). Tilley argues that we cannot begin to understand the meanings that were attached to prehistoric landscapes unless we develop a way of approaching these places through our own bodily experiences, taking into account the effects of 'synaesthesia' on perceiving and understanding these landscapes (Tilley 1994, 2004). Through the use of phenomenology as a methodological tool this time, he develops narratives that are, in effect, a recording of his own bodily encounters with prehistoric monuments. Aside from the criticisms that such an approach is based on the assumption that the human body is a universal (Meskell 1996, Brück 2005, Knapp and Meskell 1997, Hodder 1999), it also favours certain landscapes, particularly monuments, over others, for example domestic or 'ordinary' landscapes (Meining 1979b). Tilley insists that although his interpretations of prehistoric places are

open and cannot be tested, phenomenological methodologies are better equipped than descriptions through the 'closed' archaeological excavation to overcome the dualities between Cartesian space and subjective experiences of place (Tilley 2004). As a consequence, phenomenological writings manage to surmount the difficulties of combining perception with a dry academic language by exploiting the 'tropic or metaphoric nature of language, avoiding a deadened and deadening literalism, to make writing a voice for stones' (Tilley 2004:). Experiencing the materiality of prehistoric remains by visiting and re-visiting their landscapes is a contextual, in the sense of situated, way of seeing. It creates links with memory.

For the purposes of my research and in the process of devising a methodology to address the relationship between memory and architecture, such a phenomenological method that would rely on direct experience of the places we are studying, attractive as it is, would not have been very helpful for a number of reasons, not least because this research concerns less explicit, visually, memorials than monuments. Reconstructing the variable ways though which architecture interacts with the human mind and shapes memory is, by definition, a process that has to look into the temporalities and the subtle transformations that the built elements undergo and the effects they will have had on the interpretation by successive generations. A house that is rebuilt many times in the same location, the repeated process of replastering a floor or a wall, the act of digging a pit that cuts through earlier material 'residues', or the process of destroying these traces cannot be re-experienced. We might intuitively and vaguely understand how these transformations, subtle as they are, would have been talked about, transmitted across generations and how for the people involved they would have created a sense of place but we could not directly access their spatial stories. Moreover, our encounters with prehistoric *memoryscapes* are determined by what is preserved on the ground, what is visually available in the present state of archaeological sites. The policy followed, for example, in Eastern Mediterranean archaeology to preserve the latest walls of buildings would be a serious hindrance to our understanding of the biographies of prehistoric buildings portraying inadvertently a static image the past. Walking around and between these remains would give us a sense of space, enclosure and view and that is important in itself as we acquire a three dimensional mental map that it is not possible to get from photographs and plans. But at the same time we have to be aware that archaeological sites portray not just *the* past but many pasts, what Shields call 'juxtastructures' (Shields 1991) where different times are all present on a horizontal

plane and a collage of different architectural pockets of time are seen as one phase (Jackle 1987, Lynch 1972).

Archaeological stratigraphy, on the other hand, as it is recorded during excavation and interpretation is a more perceptive way of comprehending the variable associations between different pasts. It is only through the painstaking process of delineating phasing systems, stratigraphic matrices and floor horizons, however arbitrary these may be, that we can begin to make sense of how all these different pasts were in association with each other⁹. This is an obvious point and at the same time a contentious issue since the process of excavation is essentially a destructive process that removes all traces of associations. Moreover, the knowledge we have of the excavated remains is an interpretation of the physical and stratigraphic relationships by the people involved in excavation and, more often than not, by the people who are directing the project and are responsible for the final publication (Hodder 1997, 1999: 80-104). I accept, however, that the process of excavation creates a view of the past that is 'finished', hence it gives researchers a distance and perhaps the illusion of objectivity. In this sense, we are far away from achieving our research aims and the memoryscape of prehistoric people seems out of reach. However, I believe that it is important to formulate innovative questions that push further the data, however limited or limiting they are. This way, excavation reports are, too, open to interpretation and stratigraphic associations, if read closely, they do tell the story of the subtle transformations and repeated practices that embody prehistoric remembrance. It is also important to take a clear stance with regards to how we view the past as dynamic and still continuing to create associations and memories of place. Ingold's (1993: 152) assertion that 'places do not have locations but histories' is very relevant here.

2.4 Houses for *Homes*, Sites for *Communities*: Methodological Implications

It was emphasised earlier that the interest of this research is the construction of social and personal memories within the context of the 'ordinary landscape', the vernacular architecture of everyday life (Meining 1979a, b), as opposed to monumental landscapes that have dominated the research on memory and architecture or explicit commemoration in the form of mortuary practices and ancestral cults (Hallam and Hockey 2001, Williams 2003,

⁹ For an explanation of how stratigraphic sequences and horizons fit into the present methodological scheme and for a description of the analytical procedures followed in this thesis see chapter 5.

Chesson 2001, cf Whitley 2002). It is easy to see why both forms, but especially monuments, with their visual prominence and material endurance in the landscape, have held such a prominent place in archaeological studies of memory. The mythologies associated with these places would have lasted for as long as the material remains were visible in the landscape (Barrett 1994, 1999, Bradley 1998, 2002, Schama 1996, Chapman 1997). Their 'special' significance for whole communities and regions and the distinctive concept of punctuated time that underlies ritual acts (Bloch 1977, Bradley 1991, Munn 1992) that they would have created, constitute rich themes for archaeological analysis, perhaps much more than the daily routines and habitual action that are associated with the space of settlements and houses (see Gosden 1994, for a distinction between *thought* and *unthought* action and Herzfeld 1991, for a discussion about a similar distinction between *monumental* and *social* time). The conceptual separation of the monumental from the domestic, however, it has long been recognised, is a recent construct associated with Western and in particular European ways of seeing (Cosgrove 1984, Segal, Campbell and Herskovits 1966, J. Thomas 1993, Bradley 2001, 2005). Hirsch (1995) argues that the painterly origin of the concept of the landscape in post-Renaissance Europe created the conceptual separation of the idea of the ordinary life of work and home from an imagined idyllic Arcadian landscape; the first is 'foregrounded' the second acts as a background, suggestive of the potential and possibilities. Although current work stresses that the landscape is not a passive setting but a cultural process, the emphasis on such concepts as 'sacred', 'conceptual', 'idealised' and 'symbolic' landscapes (e.g. Knapp 1999 and the critique by Van Dommelen 1999) runs the risk of marginalising the realms of communities and dwellings as unimportant or mundane. With regards to how memory is formed and sustained, an equally cumbersome distinction appears between inscription and incorporation (Connerton 1989), or between the material and the ephemeral (Kühler 1987, 1988, 1999, Rowlands 1993), the former in both cases obviously withstanding archaeological visibility and discovery¹⁰.

The study of domestic architecture is ideal for redressing the balance between these opposing concepts. The construction of a house, for example, is in itself an act of inscription,

¹⁰ The study of memory in relation solely to its expressed materiality and visibility, like in the case of monuments, neglects the importance of other memorial forms in the landscape. Ethnographic examples include Australian Aboriginal landscapes where the journeys of the ancestors in the land, are 'inscribed' in the natural landscape; rock art; the Malangan mortuary ceremonies where funeral sculptures are carved, only to be destroyed as part of the process of burial ritual; the origin myths in many societies that trace the movements of their ancestors in the landscape and that are remembered without any conspicuous *aides memoire* (e.g. Morphy 1991, 1995, Ingold 1995b, 2000b, Kühler 1987, 1993, 1999, Keates 2000, also cf Lowenthal 1975, 1995, 1996).

in two senses. First, as physical entities, domestic buildings mark the land, create notions of permanence and transmit more transient ideas of inheritance, origins and genealogy (Rivière 1995: 37-40). Secondly, they create a specific shared language (Rapoport 1982, Lawson 2001, Bourdieu 1973) that serves as an important mnemonic for successive generations. Architecture creates 'heightened awareness', Tuan argues, and this is perhaps more important in non-literate societies where the house is not perceived in terms of a finished design but is continuously modified and rebuilt (Tuan 1974: 104). It is 'a world within a world' (Bourdieu 1990: 283) that teaches children and new arrivals, the history and mythology of the group as well as the cultural norms, taboos and social system (Bourdieu 1973). The layout and materials of settlements and houses are hence forms of inscription in the landscape and although they are subject to the process of decay, or they are abandoned, relocated or rebuilt, they often imbue people with a sense of immortality, as ethnographic examples suggest (Waterson 2000: 182, Rodman 1985a, b). On the other hand, domestic architecture is also relevant to less visible or explicit associations with the past. Bachelard (1994) and Connerton (1989) use the metaphor of sedimentation referring to spatially situated bodily routines. Architecture with its concrete boundaries exclude or incorporate people, create specific routines of walking, seeing and interacting with one another (Tilley 1994, Bourdieu 1973, 1990, Bloomer and Moore 1977). In this sense I take houses to represent one of the clearest cases of 'distributed objects' (Gell 1998).

2.4.1 Houses for 'homes'

Places, such as houses, that localise specific personal memories are relevant to an 'imagined topography of our intimate being' in Bachelard's words (1994: xxxvi). He coined the term *topoanalysis* and used it in a very different way from that used here; for it is not just the spatial location of memory or the architectural space that interested Bachelard but the poetic space of the house. He describes the qualities of the house as a protected centre of the intimate world and explored the images of the felicitous space (*topophilia*). He talks about 'secret rooms that have disappeared' and yet they 'become abodes for an unforgettable past' (Bachelard 1994: xxxvi, also Tuan 1974). In other words he was interested in what we identify with as *our* home rather than *a* house (Sopher 1979, Seamon and Mugerauer 1985). For archaeologists who are interested in teasing out such meanings from the buildings they excavate, rather than viewing them as empty spaces, there are certain problems that have to be addressed before any attempt at interpretation. First of all, archaeologists do not

excavate homes, families or households or any other social group for that matter, but the physical settings and residues of activities. Secondly, there is the risk of misguided ethnocentric interpretations, since the notion of privacy and the emergence of spaces of intimacy, seclusion and property are associated with the development of the concept of the individual in Europe, from the Renaissance onwards (Ariès and Duby 1987).

The former problem, the identification of Houses, households or families in the archaeological record has been the subject of intense research and long-standing interest, in the last few decades. A wide range of methodologies that deal specifically with the record at the micro-scale have been developed (Blanton 1994, Bruck and Goodman 1999b, Carsten and Hugh-Jones 1995a, b, Hendon 1996, Netting, Wilk and Arnold 1984, Joyce and Gillespie 2002a, b). The concept of the household refers to the task-oriented, co-resident domestic group that functions as an independent unit of production, reproduction and consumption (Wilk and Rathje 1982). It is often defined as isomorphic with the family and viewed as an adaptive mechanism, where economic strategies and social rules ensure survival of the group (Goody 1958a, Laslett 1972). Ethnographic research, however, has shown that there is so much cross-cultural variability with regards to household dynamics, that is, in the composition, definition and strategies of social actors, that the search for universals is rather futile (Hendon 1996, Yanagisako 1979). Moreover, criticisms developed within feminist anthropology emphasised that equating families and households with the biological facts of reproduction and kinship is misplaced since it does not take into account the 'contested and dynamic nature of domestic relations' (Hendon 1996: 46). Archaeological recognition of domestic activity areas and inference of the tasks undertaken by the household members, by means of artefact distribution and quantitative methods of spatial analysis, have developed alongside anthropological cross-cultural models of household composition (Blanton 1994, Ciolek-Torrello 1984, Rapoport 1990, Kent 1984, 1990a, b, Carr 1984). These methods also run into problems, because however careful archaeologists are in delineating 'systems of settings' and 'systems of activities' (Rapoport 1990) it is not always possible to identify the kinship structures of these groups. Various ethnographic examples have shown that not all households are co-resident and not all families comprise households (Yanagisako 1979, Bender 1967). Some archaeologists have questioned the validity of this kind of research altogether since not only the household is too ambiguous a concept but also untenable, archaeologically, given the compressed time scales that archaeology identifies (Smith 1992). In other words, Smith argues, we cannot identify the remains of

single households since the temporal phases of archaeological sites and the units of analysis are rarely at a fine enough scale, of less than a century, to deal with specific generations. Smith proposes the concept of 'household series' as the 'sequence of households that successively inhabit a given structure or house over a span of more than one generation' (Smith 1992: 30).

Furthermore, the application of anthropological models of households and families to archaeological data has to take into account the limitations of these models and the long held debates within anthropology with regards to a restrictive emphasis on synchronic variability at the expense of the temporal dimension. Hence, any undertaking of research at the level of the house and household must combine the spatial dimension with the time depth that links the developmental cycle of the household with the life histories of the physical structures; the changes and life stages of individual members; the ideology of genealogical transmission; the continuity or discontinuity of physical and social houses over generations (Goody 1958a, Joyce and Gillespie 2002, Tringham 2000). It is indeed this time depth, inherent in genealogy and kinship, but also, relevant to their architectural expressions, that allows us to conceptualise the various ways that houses embody the collective memory, stories and heirlooms of the group (papers in Joyce and Gillespie 2002). In other words, we have to view space as a vertical construct (D. Bailey 1990). In the present research, therefore, I use the terms 'house' and 'dwelling' to refer to the 'repeated action in one location in a social context' (D. Bailey 1990: 24) regardless of the kinship and residence pattern of the social group associated with the house or with a group of houses. Inevitably, some assumptions about the household and the domestic group are considered but that is not the primary concern of this thesis. Similarly, no attempt is made at a detailed spatial analysis nor detailed consideration of the functional identification of domestic space versus other kinds of units, although, again, limited inferences are made. The focus of this work is on the temporal depth of activities and on the sequences of actions in relation to the physical and social structures that create a memory of place and identity. And this brings us back to the notion of topoanalysis as used by Bachelard (1994) and the second problematic associated with the idea of home and privacy and the danger of imposing ethnocentric concepts onto prehistory. I do not believe, however, that viewing houses in their historical and biographical dimension falls into the ethnocentric trap so long as we expand our definitions of domestic groups and houses beyond the ecological and economic concepts of production, survival, competition, wealth and property rights. If we remove the modern

constructs of possession and consumerism, from the notion of home, what remains is the sense of attachment and rootedness to a place from which individuals and groups draw their identities (Altman and Low 1992, Relph 1981). And it would be equally ethnocentric and presumptuous on our part to assume that prehistoric societies were 'placeless' (Shields 1991, Soja 1989, Hudson 1979).

Nevertheless, we do have to recognise that the concept of *home* is culturally laden and that it goes beyond the form and symbolism of its architecture (papers in Benjamin and Stea 1995). Kent (1993b) notes, for example, that while home, for most Westerners, is a psychological concept, rather than a purely architectural form, it does not seem to apply to all traditional societies in the same way. In a cross-cultural analysis, Kent gives examples of how some sedentary and semi-sedentary societies regard their dwellings. She particularly highlights the difference between individual meanings, attached to the house by Euro-American societies, and collective, or even cosmological beliefs, as represented in the house form, held by traditional societies, such as the Navajo Indians. She also shows that in semi-sedentary, formerly nomadic, hunter-gatherer groups, such as the Basarwa in the Kalahari Desert, people do not attach any particular symbolic or psychological meanings to their dwellings other than using them as temporary and flexible shelters (Kent 1993b). The same connection between sedentism and house symbolism has been espoused by Wilson who differentiated between the open and fluid boundaries of hunter-gatherers societies and the closed, more restricted (and imbued with symbolism) boundaries of sedentary groups (Wilson 1988, *contra* Ingold 1995b, also Cox, Sluckin, and Steele 1999; for archaeological examples see Hodder 1990, Watkins 1989, 2004a, b, 2005).

2.4.2 Sites for 'communities'

Similar concerns have been, recently, expressed, with regard to the definitions, analytical approaches and reconstructions, archaeologists attempt at the level of the community (Brück, J. and M. Goodman 1999a, b, Yaeger and Canuto 2000, Canuto and Yaeger 2000, Isbell 2000). In line with discussions that stress the social and cultural construction of the landscape, it has been argued that the archaeological site is not always isomorphic with the concept of the community (Brück and Goodman 1999a, b: 3-4). Indeed, concepts that define spatially the fluid and changing boundaries of communities include the *taskscape* (Ingold 1993), the cultural landscape, the micro-region (Yaeger and Canuto 2000: 10), landscapes of *inhabitation* (Barrett 1999). In short, the concept of community should be viewed as a social

and ideological construct which, whilst is often articulated through the spatial arrangements, shared material culture and co-residence, is not, however, a static, closed or universal entity (Yaeger and Canuto 2000: 3). Moving away from environmental reconstructions, site catchment areas and resource exploitation, these new approaches emphasise instead the role of identity and interaction in the formation of communities (see papers in Canuto and Yaeger 2000).

A distinction between 'natural' and 'imagined' communities has significant implications with regard to how we define and locate prehistoric communities in space and time (Isbell 2000). 'Imagined' communities express more intangible ideas, such as memory, identity and discourse (Anderson 1983, Isbell 2000, A. Cohen 1985). Whilst anthropologists, like Redfield (1955), defined the community as a natural and universal social unit that exhibits distinct characteristics and slow rates of change, more recent approaches that have been influential in archaeological analyses of settlement dynamics, highlighting the multi-dimensional and multi-vocal character of social units, where there is always room for individuals to choose, construct or contest their membership within various communities (Anderson 1987, Ashmore 2002: 1177, Giddens 1984, Joyce and Lopiparo 2005, Yaeger and Canuto 2000, Pred 1990).

The 'interactionist' definition of community that Yaeger and Canuto (2000) advocate, emphasises the 'relationship between the interactions that occur in a given space and the sense of shared identity that both fosters and is fostered by these interactions' (*ibid*: 6). It follows, of course, that the temporal and spatial scales of these interactions vary immensely, and, in some cases, the formation of collective identities-communities, as a direct result of these interactions, cross-cut the boundaries of individual sites to include regional ties¹¹. Similarly, the reverse is also true; in any given site there might exist more than one community, in the form of neighbourhoods, extended families, clans, lineages etc. Often, what constitutes the binding factor are claims to common origins, whether descent from the same ancestors or from the same origin-place (Marcus 2000, for New World examples). Hence, an important facet of the concept of community, that is more of interest here, is the historical and biographical dimension that determines, to a large extent, not only the boundaries and spatial conditions of communities, but also their time-depth and shared memories of the past. Acknowledging the temporal dimension of communities and the

¹¹ For this reason, archaeological sampling, when examining communities, should be at the mid-level scale; the micro-region (Yaeger and Canuto 2000: 10, Brück and Goodman 1999b).

formation of common identities as historically contingent and ever changing is important, because, in this sense, what we are studying archaeologically are always *instances* of communities (Yaeger and Canuto 2000: 6) rather than stable or static social and spatial formations. Moreover, it is well known that, in stratigraphic terms, we can rarely establish absolute contemporaneity between units or households.

In this thesis, where a multi-scalar approach is adopted, I use the term community interchangeably with that of the settlement, or rather with the social group(s) that reside and are co-present in a settlement, assuming that the latter has been adequately defined in space and time by excavation or survey. However, in order to avoid deterministic and static definitions of settlements, it is recognised from the start that the act of settlement is a *social practice* (Pollard 1999, Barrett 1994, 1999, Chapman 1997) rather than a matter of spatial coordinates and boundaries. At the same time, I also recognise that communities exist at different scales, as mentioned above, and in the case of Cypriot prehistory, this has to be addressed in future research (see Clarke 2001). From an interpretative point of view, what is being sought is the *longue durée* of a community, the biographies and histories of places that 'record' in their own way the biographies and histories of individuals and social groups (Joyce and Hendon 2000, Joyce and Gillespie 2000b, Ashmore 2002: 1177-80).

The rationale for such a methodological and interpretative framework rests on the argument that memory plays an important role in the construction of short-term and long-term continuities (*contra* Hodder 1999: 130, but see Hodder and Cessford 2004, Hodder 2006) and that the material histories of houses have an important contribution to how people actually *perceived* continuity and/or a break with their past. The mechanisms that have some bearing on how such place memories are formed and transmitted are variable, and, in many cases, they have a direct effect on the patterning of the archaeological record. The distinction between formal and informal memory is a case in point. Highly formalised rituals that take place in defined public spaces, for instance, will have different archaeological signatures as well as social ramifications, from informal, infrequent, or private rituals (Whitehouse 1994, 2003, Lane 2005, Bradley 2005: 207-9, Rowlands 2003). A variation in this theme has been variously demonstrated in the treatment of the dead and the distinction between primary and secondary burials (Metcalf and Huntington 1991, Hertz 1960, Keswani, Chesson 1999, Kuijt 1996). Similarly, the architectural record can be very telling with regards to strategies of formal or informal memory and transmission, as the case of *tells* and their differences with

open sites demonstrate (e.g. Tringham 2000, Chapman 1997, Stevanović 1997, Steadman 2000, Düring 2005, Cutting 2006).

Chapter Three

Slicing Up Memory: From Internal to External, Individual to Society.

The Status of Memory in Contemporary Discourse

Memory and history are opposed, not synonymous. Memory is life, always embodied in living societies and as such in permanent evolution, subject to the dialectic of remembering, forgetting, unconscious of the distortions to which it is subject... history on the other hand is the reconstruction, always problematic and incomplete of what is no longer. Memory is a phenomenon of the present, a bond tying us to the eternal present; history is a representation of the past...*Memory situates remembrance in a sacred context. History ferrets it out.*

Pierre Nora 1992b, p. 3 [emphasis added]

3.1 Introduction

The general subject of this thesis is the various expressions of remembrance and forgetting in the archaeological record of pre-literate, pre-state societies, with special reference to the architectural record and the nature and the extent to which prehistoric 'mnemonics' of place in the broad sense have an effect on social continuity. It is attempted to isolate the *places of memory*, as diverse, ephemeral, or material as these may be and to situate them within specific sociocultural and practical contexts. However, it was recognised from the start, as mentioned in the introduction, that there are numerous ways of referencing and communicating the past, some more permanent, visible or persistent than others that may point to different uses and perceptions of the passage of time, different demands on memory and the different constructions of identities on the part of the society under investigation. Writing systems and monuments – the two most talked about and 'efficient' transmitters and 'containers' of information – are absent in the specific chronological and geographical context of this study, as they are in many other cases. However, equating

memory solely with technological advancements or with architectural sophistication, apart from being clearly ethnocentric, would also give a very limited definition of one of the most intricate cognitive functions of the human mind.

One of the tasks of this thesis, then, is to gain a better understanding of the workings of human memory, an essentially multi-disciplinary endeavour, before devising the methodological framework that will guide the extraction of relevant information from the archaeological record. I attempt to do this by critically looking at how different disciplines have approached the concept of memory; their assumptions; points of contention; and scales of analysis. I proceed by considering the implications for extending contemporary models of memory to prehistory. This latter point is significant and bears on the emic/etic problematic and the caution required when applying models that are derived from a Western worldview to entities that probably neither had Cartesian dichotomies nor capitalist systems as part of their reality and historical experience.

The study of memory, once solely the domain of psychology and medicine, has recently received the attention of scholars from a variety of disciplines covering a wide range of subjects, epistemological approaches and geographical contexts. Sociology, cultural studies, anthropology, geography, philosophy, literature and cognitive science have all emerged, among others, as major contributors in the field of memory studies. Inevitably, this means that there is a vast cross-disciplinary literature on the subject, as well as many definitions of memory, which more often than not contradict each other, partly because we are dealing with a highly complex mental function and partly because there is no communication between the sciences of memory and the sociology of memory (Hacking 1996). Therefore, an exhaustive review is not possible nor is it relevant here. Instead, I concentrate on certain problems that were encountered in the course of this research with regard to the theoretical orientation and the stance that this thesis takes.

As Nora (1992a: 3) observes in the epigraph, the concept of memory is a dynamic process, which, whilst it is affected by social norms and cultural practices, is also intimately linked with the idea of the person and involves active search and continuous re-interpretation of the past – things not very easily fleshed out of a static and nameless archaeological record. It was initially thought that the best way to approach the subject would be from a 'local' point of view. This entails a shift of focus from the general to the particular and the long-term to the very short scale (Foxhall 2000). More importantly, it requires a move away from abstract generalisations about human behaviour to 'cultural'

questions (Hodder 1999, Shanks and Tilley 1987). Thus, we would be looking to explore how prehistoric Cypriot communities let the past into their present, which material media and mnemonic practices they employed in the process and how their particular identities were communicated. That is, in relation always to local contexts both spatial – as opposed to wider Mediterranean ‘world systems’ – and chronological – as opposed to their place in a social or technological evolutionary ladder.

Yet, in the very first sentence of this chapter I immediately contradicted this by describing the spatio-temporal contexts of this study in relation to what came after and hence referred to them as pre-literate, pre-state and pre-historic. In other words, by following the conventions of archaeological terminology it I inadvertently implied, respectively, the lack of technological achievement, the lack of official memory and, worst, the lack of an awareness of the past. Whether this simply reveals a cumbersome terminology¹², or goes deeper and shows the extent to which we are still thinking in terms of the hot/cold societies distinction (Levi-Strauss 1966) is debatable. In any case, this is just an example of the difficulties of expression and rigid dichotomies that are soon encountered in the literature on memory, including archaeology. Whilst the local questions will be addressed later, in this chapter we are required to face ‘bigger’ questions which have methodological implications that cross-cut the cultural boundaries that we set. In particular, I concentrate on the oppositions between internal – memory as a private, ‘natural’ process – and external – memory as a public record, socially shared and objectified in technology. A second, related distinction appears as the treatment of memory in psychology is largely confined to the level of the individual; whilst in other social sciences remembering is being studied as a social attribute. There is not much overlap between the two since there are fundamental epistemological differences both at the level of scale – individuals or groups – and of the subject of analysis – the mind/brain or the external world of societies, technology and institutions. These issues have implications on first the relationship between memory and material culture, and secondly on the scale of analysis that is appropriate here.

¹² The term prehistory has been criticised as politically incorrect when used in a global context that privileges the written over the unwritten and the western over the non-western. Hodder, notes, however, that even the label archaeology is not entirely appropriate because of its ‘logocentric assumptions of an origin – *‘arche’* (Hodder 1999: 8-9). The problem lies in the inconsistent use of the term prehistory, rooted in Victorian thought which compared contemporary societies to prehistoric ones, thus treating the former as uncivilised and remote preserving ways of life that elsewhere have passed (Bradley 2002: 3-5, Trigger 1989: chapter 4, Gosden 1999: 9).

3.2 Remembering as Individuals

'...to count a memory, a cognitive experience, or thought, must contain the conviction that *I myself* was the person involved in the remembered scene... It is in *myself* that the truth to be uncovered must lie. Mary Warnock - Memory [emphasis added]

Remembering has been linked to the idea of the person, hence identity and experience, in most philosophical accounts since Plato and Aristotle. There is no doubt that memory is first and foremost an individual act. The way we create imagined representations of ourselves through looking back at our past has been pursued by artists and creative writers and is at the heart of psychoanalytic theory (Freeman 1993, Kotre 1995, Prager 1998, Swanson 2000, Warnock 1987). Proust's obsessive probing into the fragile nature of memory was captured in the eight volumes of *In Search of Lost Time* (1966). His insights concerning the link between past and present and between involuntary memories (visual, auditory, olfactory) and conscious recalling have found support in scientific research half a century later (Delacour 2001, Schacter 1996: 26-28). From a different perspective than Proust's *pétite madeleines* and with different methods, cognitive psychologists have modelled the workings of human memory, taking the individual as their elementary unit of analysis.

3.2.1 Memory in the laboratory

The psychologist Frederic Bartlett, in his frequently cited work *Remembering* (1932) studied the transmission of mythical stories and the way people may transform elements of the stories they tell as they recall them according to culturally and socially accepted norms. His explanation of this process is best known as *schema* theory, which generally refers to the existing knowledge a person has about the world. In his attempt to understand how new material was incorporated within these prior mental frameworks, he argued that people tended to omit, level out or rationalise details of stories based on their personal experience and on what they thought was socially acceptable. Bartlett's work has been revived in recent years, because of his insistence on the 'functional adaptiveness (of memory) to social conditions' (Edwards and Middleton 1987: 89, Shotter 1990, 1991) and his focus on the individual as an active participant in the social world (Fentress and Wickham 1992, Middleton and Edwards 1990). Although today the specifics of his *schema* theory might be considered to be lacking detail, outmoded or mentalistic (Boyer 2001b: 67, Costall 1991: 45),

nevertheless, Bartlett was well ahead of his time. His colleagues continued to scrutinise the human mind in the laboratory, totally isolated from the external world for a long time (Neisser 1982).

The scientific explanation of memory is only just over a hundred years old. Most psychologists today acknowledge that the start of a truly empirical, objective and methodical approach was signalled by the innovative experiments of Ebbinghaus in the 1880's (Baddeley 1990). Ebbinghaus and his followers, unhappy with the unproven status of philosophical reflections on memory, sought to test memory performance in a controlled and statistically meaningful way. They were concerned, primarily, with rote memory, which involves verbal memorisation with the only stimuli given to the subject being long lists of words and nonsense syllables completely devoid of meaning. The rates of retention and decay of information were then precisely timed and presented in his famous 'memory curve' that showed which information failed to be recalled at certain timings (a 'forgetting curve' according to Casey 1987: 9-10). Experimental psychology of this kind was subsequently developed into a highly respectable science and its findings have resulted in most of the widely accepted models today, one of them being the associative model that is explored below and which is based on the distinction between short-term and long-term store (Cohen 1990: 2). Together with substantial progress in the domain of neuroscience, experimental psychology offers a detailed picture of how memory works mainly in terms of accuracy, distortions and retrieval, in relation to both the physical aspects of the nervous system and the experience of individuals.

Whilst I am mostly concerned with long-term memory in this thesis, it is worth noting that cognitive scientists distinguish between a number of different kinds of memory subsystems. In recent years the question whether these represent a unitary system or a series of interacting, interconnected systems has arisen (Baddeley 1999). According to the most popular associative or modal model there are three interacting types of memory: sensory, short term, and long term (Baddeley 1999, Anderson and Bower 1973). Sensory information that we receive directly from the environment, whether it is visual or auditory, is registered in the short-term memory for a limited amount of time. This temporary store, also termed working memory, acts as a crucial link between initial input and retaining data in the long term memory store. Long-term memory stores information for a lengthy period of time, if not permanently, and concerns both memory for factual knowledge and personal experiences as well as both implicit (motor skills, priming) and explicit (declarative or

propositional) memory. That short-term and long-term memory are two distinct systems is evident in some brain pathologies, as for example in global amnesic syndromes where short-term memory may be intact while the long-term memory of the same material is significantly damaged. The associative nature of human memory is supported by neurophysiologic evidence, whereby the process through which the brain records events is by forming synapses and strengthening connections between different groups of neurons in different regions of the brain (Schacter 1996, Sacks 1970).

The basic unit of analysis in this kind of work is always the mind/brain of the individual rememberer. The objective, especially in research on working memory, is mostly the time that sensory information is encoded in the brain and accuracy of retrieval. This line of research, notwithstanding the important insights, has been criticised as mentalistic or reductionist, neglecting the role of subjective remembering, the influences from the social environment and the experiential basis of all conscious remembering. Moreover, it tends to equate memory with memorisation, that is the conscious effort and rehearsal involved to remember as accurately as possible. A more recent development in the field of memory studies addresses this imbalance in greater depth and it is where the potential for a more integrated approach lies.

3.2.2 Memory in the real world

In the 1970s the ecological validity of the experimental approach began to be increasingly questioned as to whether this kind of controlled, isolated environment of the laboratory contributed anything to knowledge about how 'real' memory works. Neisser drew attention to the fact that focusing on mechanisms and models of abstract behaviour told us very little about the practical functions of memory in 'natural contexts' as part of the ongoing everyday life and experience (Neisser 1982). He forcefully argued in favour of an all encompassing science to rigorously test experimental findings in the real world, in ecologically valid settings, where, admittedly, performance curves and ratings have very little significance. This new approach has gained ground in recent years and important studies have appeared in this direction focusing on memory for personal experiences, the role of factors such as emotion, personality and culture, the reconstruction of the past in narrative and communication and the continuous reworking of experience (Cohen 1990, Neisser and Hyman 2000, Neisser and Winograd 1988, Pillemer 1998, Rubin 1986, 1996). Everyday memory research is concerned less with memorisation and working memory and

more with the way long-term memory, especially autobiographical, works in various contexts and is influenced by various situational demands. It is possible, then, to sketch a preliminary picture of how memory works from both experimental and 'natural' research in psychology.

The domain of long-term memory, which is of interest here, is divided into procedural and declarative. The former involves performing tasks, learning cognitive skills or acquiring perceptual-motor skills, while the latter concerns knowledge that can be expressed symbolically. In addition, declarative memory is not automatic but requires conscious retrieval and direct attention (Eysenck and Keane 2005: 229-59). One of the most revealing distinctions of declarative memory is between semantic and autobiographical or episodic. The former involves factual knowledge about the world: for example, when we 'recall' that Edinburgh is the capital of Scotland, as well as certain norms and procedures that we follow routinely in our everyday life but are socially and culturally pre-determined. This is the basic idea of the *schema* model previously mentioned, called also script or cultural model, containing condensed information that can be accessed to interpret new situations, and determines or restrains behaviour; for example the restaurant script (first you go in, wait to be seated, order, eat, and lastly pay the bill etc.). The domain of semantic memory, where individual behaviour and social norms go hand in hand has recently attracted the attention of anthropologists, as the area where private representations become public knowledge and vice versa (Bloch 1998, Sperber 1996). It is often conflated with historical memory, but as we shall see this is a problematic equation, unless one makes clear that they refer to official memory, organised by secular or religious authorities and reflecting to an extent the interests and specific worldviews of power structures. On the contrary, it has been suggested that there can be a number of conflicting versions of the past from people who have had a personal, traumatic experience of the historical event in question (see papers in Antze and Lambek 1996, Pine, Kaneff, and Haukanes 2004b).

Autobiographical or personal memory is precisely where research 'in natural contexts' has proven to be most illuminating about human behaviour and a subject rarely taken up by social scientists in any detail, with a few notable exceptions (Whitehouse 1994, 1995, 2000, Bloch 1996). Although a single definition of autobiographical memory still evades psychologists, it usually refers to 'the capacity of people to recollect their lives' (Baddeley 1992: 26), hence it is deeply personal, involving the 'reliving of the individual's phenomenal experience of the original event' usually accompanied by a firm belief that

what is remembered is an accurate testimony (Rubin 1996: 1-2). Autobiographical memory usually takes the form of narrative, and the ‘memorability’ of certain episodes over others in one’s life is usually influenced by originating events, intense shock, trauma and emotional effect; self defining episodes but also socially and historically influential events (Pillemer 1998).

3.3 The *Loci* of Memory: Internal versus External Storage.

3.3.1 Encoding and Retrieval of Information: *Engrams* and *Exograms*

<i>Engram</i>	<i>Exogram</i>
Fixed physiological media	Virtually unlimited physical media
Constrained format, depending on type of record, and cannot be re-formatted	Unconstrained format, and may be re-formatted
Impermanent and easily distorted	May be made much more permanent
Large but limited capacity	Overall capacity unlimited
Limited size of single entries (e.g. names, words, images, narratives)	Single entries may be very large (e.g. novels, encyclopaedic reports; legal systems)
Retrieval paths constrained; main cues for recall are proximity, similarity, meaning	Retrieval paths unconstrained; any feature or attribute of the items can be used for recall
Limited perceptual access in audition, virtually none in vision	Unlimited perceptual access, especially in vision
Organisation is determined by the modality and manner of initial experience	Spatial structure, temporal juxtaposition may be used as an organisational device
The ‘working’ area of memory is restricted to a few innate systems, like speaking, or subvocalising to oneself, or visual imagination	The ‘working’ area of memory is an external display which can be organised in a rich 3-D spatial environment
Literal retrieval from internal memory achieved with weak activation of perceptual brain areas; precise and literal recall is very rare, often misleading	Retrieval from external memory produces full activation of perceptual brain areas; external activation of memory can actually appear to be clearer and more intense than ‘reality’

Table 1. Properties of internal and external memory compared, after Donald 1998: 15.

Despite the layperson’s understanding of memory as either a photographic record or a snapshot, psychologists argue that the encoding and retrieval processes involved when we recall are quite different. Personal memories are reconstructed from fragments of experience and our access to them can be restricted or appear distorted with time. The process of encoding refers to the transformation of fleeting sensory data to long-term durable representations. In the case of working memory this is achieved through the phonological loop, which refers to linguistic rehearsal for a very limited number of data that are going to be retained only for a few seconds, for example remembering a telephone number

(Schachter 1996: 42-4). But for more persistent information *elaborative encoding* – specificity – is taking place, whereby one has to associate the incoming information with existing knowledge: for example, when we memorise a serial number like the PIN of our cash card by finding meaningful associations like our birthday or a date of a historical event). This is the most commonly used mnemonic device but is also true for the process that takes place in the nervous system and the way our brains order the external world. These connections between nerve cells are where the ability for registration in memory resides and has been called the *engram* (Tulving 1983).

However, one of the most significant differences between animal and human memory is that we have developed the capabilities to extend the biological limitations of our memory system and the restricted number of information that are encoded in the *engram* by virtue of symbolic technology (table 1). Donald coined the term *exogram* by analogy to the *engram* to describe the unlimited number of entries that external symbolic storage in the form of texts, computers etc. can hold, but also expand, cross-index and reformat (Donald 1991). External technologies of memory exemplify, according to Donald, our species' unique trait, which is characterised by a hybrid cognitive system grounded on the culture-brain symbiosis (Donald 2001, Clark 2003). Rose goes as far as to say that what sets human memory apart is not the *engram* and the connections in the brain, present in most animals, but our capability for inscribing our memories on technological media, which ultimately means that 'whereas all living species have a past, only humans have a history.' (Rose 2003: 387).

From an evolutionary perspective, Donald has proposed a sequence which follows the emergence of the symbol-using human species through a series of cognitive adaptations. The emergence of the linguistic mind marks a major break with previous restricted non-verbal acts of communication such as gesture and mimesis, characteristic of the primate episodic and mimetic stages. Deacon has also presented the case for the co-evolution of language and the human brain and calls modern humans 'the symbolic species' whilst contrasting the symbolic aspect of language with earlier iconic or indexical forms of reference (Deacon 1997). The physical changes (increased brain size, vocal cord etc.) might have been secondary, developing as a response to the pressing need to replace gesturing and grooming as a means of communication and information exchange in larger groups, with language, a much more effective means of transmitting information (Dunbar 1997). Language, in turn, led to the development of an oral-semiotic culture with narrative

structure, conceptual thinking and, through myth, 'a collective expression of reality' (Donald 1991: 257). The invention of the phonological system meant that memory could be rehearsed and repeated, what Baddeley (1990) calls the auditory system of working memory. Nevertheless, according to the prevailing view, it was not until writing was invented that a major hardware change occurred in the human memory system and a new system for representing reality was signalled. Donald asserts that the new structure had little to do with genetically encoded changes in the brain but rather is the consequence of new memory technologies. Goody (1977) has similarly argued that what characterises modern from pre-modern thought is the technological change in the means of communication. He suggests that logic is a function of writing since it enabled human thought to be ordered, sequential and to develop syllogistic forms of reasoning (see also Watkins 2001a, b, Olson 1994, Ong 1982).

3.3.2 Technological Metaphors and the Cognitivist Paradigm

So far, a basic account of the workings of human memory has been briefly sketched, with insights from cognitive psychology. I have generally followed the descriptive language of psychology, which is obviously influenced by the computer analogy. Terms such as 'storage', 'retrieval', 'processing of data', 'encoding', 'input' and 'output' are indeed the latest metaphors for memory. In spite of new directions in everyday memory and the aspiration to situate remembering in 'real' contexts the prevalent cognitivist paradigm still provides most of the terminology and methodology. Indeed, at about the same time as Neisser (1982) proclaimed the importance of research in natural settings, the cognitivist paradigm based on research in artificial intelligence and the direct analogies with the computer had already been established as the mainstream model of the human mind. According to this view, the workings of the human mind, including perception and memory, are explained by two internal cognitive processes: symbolic computation and representation. Both find support in computer design. Simply put, the way the human mind processes the information received from the environment is by forming internal representations of features of the external world and by constructing some form of mental symbols that govern our actions giving us clear information about '*what is where*' (Johnson-Laird 1988: 35). To explain how that happens, on a physical level, cognitive scientists appeal to the process of symbolic computation; a series of pre-defined (rule-based) operations on

symbols with semantic values. The built-in addresses of a computer are such symbolic computations that are constrained or follow the given – pre-programmed- syntax.

The refutation of this model and the severe criticisms that it has received are well known. No one denies that computers have evolved into extremely powerful machines. Their ability to store, codify, compress, and retrieve an enormous amount of information means that the manufacture of a far more superior memory capacity than human memory is a reality. However, despite their efficiency, computers cannot replicate the ability of human memory not only to contain but also to reflect, select and interpret information. We are repeatedly reminded by opponents to the cognitivist model of the human mind that machines lack self-consciousness and more importantly the ability to engage reciprocally with the external world (Searle 1984, Dreyfus 1979, Ingold 2001b and papers in Ingold 2000a, Clark 1997). Casey in his critique of computationalism as untenable from a phenomenological perspective asserts that ‘memories are up to us’. It could be argued that these criticisms represent not only ‘real’ problems with the model put forward by cognitive scientists but also reflect a reaction on moral grounds against anything manufactured, outside ‘natural’ human consciousness – concerns that were shared by Plato, who believed that the technology of his time, writing, was inhuman and destroyed memory (Plato in *Phaedrus*, cited in Ong 1982: 79). But we can also say that the recent reaction against cognitivism stems from an inability, on the part of cognitive science – to draw the line between invoking metaphors to explain memory and modelling it on a functional basis as a mirror of the computer.

The use of metaphors in scientific explanation is very common. They can be either poetic – providing a phenomenon with a visual image, evocative – borrowing a principle from another sphere, or having a structural and organisational identity – accurately describing the functional properties of the phenomenon under question (Wall and Safran in Rose 2003). Especially when it comes to dealing with the ambiguities of human memory various metaphors have been employed. Carruthers distinguishes between two sets of ancient and Medieval metaphors: one deriving from the analogy with a written surface – wax tablets in Plato, signet rings in Aristotle, *tabulae memoriae* in the Middle Ages, the other from the analogy of the container – storehouse, strong-box, thesaurus, library, cellar (Carruthers 1990: 16-45). They are mostly spatial and visual ways of explaining how memory works in a concrete manner, albeit ascribing a rather passivist role to the mind, if taken literally (Warnock 1987, Coleman 1992, Bloch 1996).

With the advent of modern science and the Newtonian revolution metaphorical thinking about memory processes and about the physical world in general changed fundamentally and it was based on mechanical analogies from the clockwork and hydraulics to electrical maze and the telegraphic system (Draaisma 2000, Roediger 1980). The computer metaphor is thus the latest technology. The problem, however, with the computer analogy, as many writers have noted, is that it was not until the developments in artificial intelligence that the practical and ideological power of that particular technology was so great that mental imagery turned into direct analogies. Hence, 'instead of biologising the computer, we find ourselves challenged by the insistence that human memory is merely an inferior version of computer memory' (Rose 2003: 89). Thus, it is not only that the current trend for describing human memory as computer storage system merely reflects the contemporary advances in artificial intelligence and the massive popularisation in the media, nor that in the next century it will be replaced by the next big thing in science and the computer metaphor will be forgotten, the same way no one thinks of human memory as a system of pipes anymore. The problem, instead, lies with mechanical notions of cognition that in effect reinstate the Cartesian split. We are told that biological memory is the hardware not as a visual analogy but it mirrors features of a computer such as memory size, central processing system and peripheral devices. The skills, language, and knowledge of individuals are taken to constitute the software of the system, much like the operating system and different programmes. Biological memory is assisted by the use of external storage devices similar to the CPU of a computer and the internal/external dichotomy is complete.

The specifics of the model, its compatibility with human biology and the problems surrounding functional details are best left to cognitive scientists. But the influence of such thinking on how we view and approach human behaviour in general, and specifically whether we accept that the internal/external correlation as unproblematic bears on how we define memory in relation to such 'externalities' as the material world of the environment and technology and the social world of actors and institutions, both of which concern us here. A few observations concern firstly, the fact that memory does not operate in terms of bits of information but in terms of meaning that is not fixed, rule-bound or permanent (Oyama 1985). Meaning concurrently is affected not only by an ever changing environment but also by qualitative and biological changes occurring during the developmental phases of exploration and socialisation in the world. Children are not born with a pre-programmed

culture that guides their action and interpretation of the world. They are born, however, in an environment where meaning has been constructed by others. Cultural instruction by elders is paramount in their socialisation (Tomasello 1999, Vygotsky 1978) but the way humans come to understand their surroundings during various developmental phases depends upon their active interaction with these 'accumulated histories' (Tomasello 1999, Torren 1993, 2001).

The 'cognitive revolution' as the new advances in psychology and artificial intelligence were pronounced (Gardner 1985, Baars 1986) encountered severe criticisms with regards to the following problems that the cognitivist paradigm of representations and rules left unexplained. Briefly, these concern: 1. the problem of solipsism and how the mind can reach beyond internal representations to the external reality; 2. the neglect of developmental complexities; 3. the problem of relevance and how one knows when to apply the supposed innate rules; and 4. the problem of where do symbols acquire their meaning from (Costall and Still 1991, Shotter 1991). Alternative explanations were subsequently developed advocating that meaning is not located in symbols and that it is not given by a central processor, but it emerges from connections between various networks of units in the brain. This is the connectionist or emergent model and it has replaced the input-output model of memory with, as we saw, the associative view, where remembering depends upon the various connection in the brain between neurons. Thus, in this view the mind is a self autonomous system that generates new properties and transformations not through rules but through co-operative activity (Varela, Thompson and Rosch 1999, Clark 1997). Despite these modifications, however, the external world is still seen as fixed and pre-given. Varela, Thompson and Rosch (1999) have recently proposed that the important issue here is the *structural coupling* of the emergent mind with the environment. They particularly draw attention to embodied cognition and the way the world is not represented but rather *enacted*. Their criticism of the cognitivist model reveal the weaknesses that were mentioned above. For example they note that when navigating by reading a map, we do not question the origins of its semantics, in other words we have no trouble believing that the map accurately represents a given terrain (Varela, Thompson and Rosch 1999:135). However, in our everyday life we do not possess or need a 'dictionary' or a map to guide us through. In navigating using our bodies we do that by *enaction*, that is, by differentiating between, for example, a path and a path home (Glenberg 1997: 4, Ingold 2001b). In addition, mental pictures that we form need not represent 'real' space or a map's bird's eye view but

remembered geographies imbued with personal memories or cultural myths (Schama 1995: 6) that are relevant to us.

Apart from philosophical problems with the view of memory and mind as information-processing devices there are more practical problems that concern how we view the relationship between remembering as a personal or cognitive experience and material culture as 'reminders' or containers of information. The analogy with computer storage is transferred to the domain of technology and material culture. Thus, the model of external symbolic storage, advocated by Donald refers to the offloading of replicative information on the cultural system. This has been influential within the cognitive-processual archaeology because it allows archaeologists to make inferences about past cognition on the basis of the material remains (Renfrew and Scarre 1998). According to Donald (1991, 1998) the characteristics of primate cognition were mainly event perception and episodic memory. The limitations of episodic memory, which is in essence a situational knowledge, were surpassed by the development of semantically structured memory systems, that is abstract systems for representing reality, which can subsequently be communicated collectively. The first two transition were primarily biological adaptations; the first occurring with the development of mimetic culture of *Homo erectus* and the second with the emergence of mythic culture, characteristic of *Homo sapiens*. By contrast, the third transition to a theoretic culture is a technological transformation that involved the invention of visual symbolism and external memory. In essence, the evolution of human cognition is characterised by a shift from internal to external memory devices. This transformation took place relatively late in evolutionary time and is characteristic of modern thought. The new system of external memory is associated with the graphic invention and theory construction. Although Donald notes that the proliferation of visual symbolism in the form of pictorial representation as external symbolic storage started in the upper Palaeolithic he only considers these as 'technological bridge ...under construction that would eventually connect the biological individual with an external memory architecture.' (Donald 1991: 284).

The concept was further developed by Renfrew (1998) who added material symbolism as a further category of memory devices with consequences for Donald's evolutionary scheme, less obvious than writing, that Donald primarily referred to, but equally effective as a means of communication and as a memory device in non literate societies. This point is perhaps among the most important contributions of cognitive archaeology, because it opens up an immense potential for the study of ideational systems

in the archaeological record that were previously largely neglected. Writing did not appear until late 4th early 3rd millennium BCE (referring to two dimensional writing as opposed to seal impressions); (Harris 1986). Extensive literacy did not appear until much later with urban civilisation and state society. In a fully secularised form it is first seen with the Greeks in the 7th century BC. The use of material culture as symbolic technologies however has a much longer history than writing and is often ignored by cognitive scientists who prefer to concentrate on language and writing systems as the epitomy of our symbolic capacity. The causative link between material symbols and conceptual views has been most convincingly demonstrated in the case of religious behaviour, which, according to some, epitomizes the human symbolic capacity (Mithen 2000). The basic premise is that tangible objects are used to symbolize intangible ideas and concepts and this becomes most readily apparent in the case of the representation of supernatural beings. A case has been put forward whereby the conception and transmission of religious ideas cannot be achieved unless these ideas are anchored in the human mind in the form of material symbols (Mithen 2000). Material symbols are critical not just to the cultural transmission and sharing of ideas but also to their conceptualisation within the mind (Renfrew 2008).

However, this model follows the guidelines of the cognitivist model, sometimes uncritically, and is subject to the same criticisms (J. Thomas 1998). In particular, the correlation between information storage and material form is taken for granted without consideration of the social and cultural context. Such direct analogies with mechanical computer storage and the objectification of memory neglect the importance of how people interact not only with technology but also with each other and how they construct and transform their past as social groups. Moreover, the analogy of ancient material forms implies that one can replay or freeze them like a video without losing anything from the accuracy of the original. However, the informational content of such mnemonic aids as symbolic artefacts, monuments and built landscapes is considerably different. It does not only vary between different chronological and cultural groups but it is also subject to continuous re-interpretation by succeeding generations. More importantly, even with writing, notation marks, or pictographic representation the concept of external symbolic storage does not take into account the use that the particular technology was put into by different societies, other than recording information and their associations with power structures and social systems. Below, alternative theories of memory that discuss these

issues are explored, which have taken their influences more from sociological theory and less from psychology and science.

3.4 Remembering as Social Groups

'The psychologist who restricts himself to the ego cannot emerge to find the nonego. Collective life is not born from individual life, but it is, on the contrary, the second which is born of the first.'

Emile Durkheim - The Division Of Labour

In the last three decades or so the concept of memory has entered public discourse and academia in an unparalleled fashion. The recent proliferation of memory studies in many disciplines exemplifies an unprecedented burst of interest in the relationships between memory, identity, and cultural narratives. Today, memory of past events is invoked to validate, commemorate, heal or lay blame on. The 'commemorative fever' (Misztal 2003: 2) of the last few decades has imposed on us a 'duty to remember' (Ricoeur 1999: 9-12) critical moments in our history associated with the political upheavals of the twentieth century, from the Holocaust to the Vietnam War. Memory in this line of research is concerned less with individuals and more with the social and political aspects of public commemoration and the formation of national identities, but also, more recently, with how minorities conceal or reveal counter-memories, in opposition to authoritative regimes.

There is very little integration between psychology and sociology, since their definitions and scales of analysis are completely different. Psychology, with its focus on internal memory and the individual, is considered contradictory to sociological treatments of external, public memory and of social groups and power structures. Mnemonic devices and experiments are replaced by mnemonic communities, such as the state, the church, the family (Misztal 2003: 15). Commemoration, tradition building, myths and historiography are seen as contributing to the formation of a shared past, highly relevant for the construction of group identity (e.g. Fentress and Wickham 1992, Halbwachs, M. 1992 [1926], Nora 1992, Olick and Robbins 1998). The psychological attributes are largely ignored and to an extent they are replaced by external factors such as political instrumentalism of the nation-state (Hobsbawm and Ranger 1983, Shils 1981) or the reaction to and contestation of dominant ideologies (Misztal 2003: 61-67, 120-125).

3.4.1 Maurice Halbwachs and Collective Memory

The concept of collective memory was introduced by Halbwachs¹³ before the Second World War and it has been described as ground breaking in the context of contemporary sociology of the social and political aspects of memory (Coser 1992: 21). Although his work was neglected for a long time, his focus on the aspects of collective memory that shape social identity and are shaped by the pressures of society for the purposes of the present is now the starting point for most social scientists that are interested in the sociology of memory. For Halbwachs there was not a doubt that the process of remembering is not a private phenomenon to be reduced in the individual realm or to be studied as an isolated mental operation. He maintained that the insistence of psychologists to study the individual human mind in the laboratory results in an incomplete picture, since it does not take account of how individuals interact with their social environment. For Halbwachs, society is not just a context or a background against which individuals act but, instead, is the cause and source of all thought. He said 'it is in society that people normally acquire their memories. It is also in society that they recall, recognise, and localise their memories.' (Halbwachs 1992:38). The act of recollection is possible not because of some brain function but because of the existence of a social framework that gives meaning and content to individual thought. Otherwise, our memories would be reduced to an unconscious state and vanish. While he recognised that it is individuals who remember, he was reluctant to attribute any important role to individual consciousness because it is within the social framework, we are able, not only to remember the past, but, also, to actively reconstruct it on the basis and for the purposes of the present. Remembering outside these frameworks is simply not possible. He said that perhaps the only realm in which society plays no role and in which the mind is to be found in total isolation is in dreams. The fragmented, chaotic and unordered nature of memory in dreams is because the mind is completely detached from the system of social representations, unable to reason and compare its 'raw materials' with that of others. 'The dream is based only upon itself, whereas our recollections depend on those of all our fellows and on the great frameworks of the memory of society' (Halbwachs 1992:42). Moreover, in dreams we are unable to tie our memories to the spatio-temporal context of complex events, unlike our ability for consciousness and reason in our waking experience. The reason for that is that in

¹³ Halbwachs deals with the notion of collective memory in his *Les cadres sociaux de la mémoire* (1925 [1952]) and *La topographie légendaire des évangiles en terre sainte* (1971). The major part of the former and the concluding chapter of the latter have been translated by L.A. Coser (1992). *Collective Memory* was published posthumously (1950).

our everyday life we are never alone, we are totally immersed in group life and most of our experiences are constructed through our collaboration with other members of the same society.

It is clear that Halbwachs drew inspiration from Durkheim's sociology (Durkheim 1965) and the focus of the latter on the mind of society and the consciousness of the collectivity rather than on psychological properties of individuals. Collective consciousness was articulated through collective representations, which are durable and stable as opposed to the ephemeral world of senses. Halbwachs' notion of shared memory is very close to such a conceptual system, that is both public and stable and that is paramount for a society's unity and the construction of social solidarity. While Durkheim saw memory only in relation to commemorative rituals as a way of preserving sacred origin myths of a society, Halbwachs provides a richer study of the construction of social memory through different social groups and illustrates its internal logic from the point of view of the group. Thus, he discusses how each family, for example, has its own mentality, its own rules and secrets, its own memories. These are not just the sum of thoughts, images, and impulses of its individual members but they 'express the general attitude of the group... define its nature and its qualities and weaknesses.' (1925 [1992:59]). They exist before us and they are independent of individual mentalities but are acquired upon our entry to and membership of that family. Under the perspective of the group, when we recollect we always reproduce a collective perception, we externalise certain landmarks and conventions that we carry within ourselves and that we retrieve only in the frameworks of society that decide what is 'memorable'. These conventions are fundamental in establishing the group's identity. Halbwachs most important contribution was that he drew attention to the fact that the duration of the group's identity is dependent upon the power of the group and the general directions of society. In other words, collective memory is always refashioned to suit the political circumstances of the present.

3.4.2 Memory, History and Politics

'Whoever controls the past controls the future. Whoever controls the present controls the past.'
George Orwell – 1984

The work of Halbwachs was revived in recent years and most social theorists of memory are influenced by his focus on the social construction of the past rather than recollection as an individualistic enterprise. The renewed interest in Halbwachs' treatise on collective

remembering resulted in a number of works that pursued his presentist approach and explored the role of political power structures in institutionalising memory of the past as the dominant mode of remembrance and, moreover, the past as the main source of identity for the present (Hutton 1988, 1993, Nora 1992a, Hobsbawm and Ranger 1983, also papers in Pennebaker, Paez, and Rime 1997). Hutton, tracing the history of memory, notes that this revived interest is not peculiar if one considers Halbwachs work as anticipating post-modernism in many ways (Hutton 1993). The interest in hegemonic ideologies, political instrumentalism, and the reaction to historiography as a means of domination were part of the intellectual thinking in the 1970s (Schwartz 1982). From this perspective, Halbwachs' argument that history is dead memory and that it has no organic part to the past makes it very relevant for contemporary intellectual agendas on domination, multiculturalism and resistance. Thus, it is best to draw a line between history as the 'authoritative, objectified version of the past' (Pine, Kaneff, and Haukanes 2004a: 31) and memory as a 'dialogue with the past' (Benjamin, quoted in Misztal 2003: 9). The experience of memory differs fundamentally to that of the historian in that, when people create memories of either the self or of a shared reality, they 'create visions of the past rather than chronologies' and these visions might differ or be opposed to the 'orthodox' version of 'approved' pasts (Watson 1994: 9). According to Nora, the acceleration of history has essentially made the distance between real memory, in the sense of inviolated social memory, and history, 'as a matter of sifting and sorting' (Nora 1992b: 2), unbridgeable. He particularly draws attention to the effects of current political trends such as globalisation, democratisation, the independence of countries after colonial domination, the growth of mass culture and the move from unity to multiplicity that marked the collapse of memory in the twentieth century. Whilst in the nineteenth century history, through archival documentation, was seen as an effort to counter a highly subjective and fluid memory which belonged to the private realm and had no place in the objective reconstruction of the past (Terdiman 1990), now most scholars acknowledge the multiplicity of narratives and are opposed to modernity's imposed amnesia and linear historicity.

In this context, presentist accounts of memory accentuate the fact that commemoration of past events organised by the secular or religious authorities aims at justifying and consolidating their power. Hobsbawm and Ranger (1983) argue that the notion of keeping old traditions alive is often invoked to legitimise authority and to establish social cohesion by appealing to the continuity with the past. However, their

definition of tradition is not the same as custom that characterises traditional societies but 'a set of practices, normally governed by overtly or tacitly accepted rules and of a ritual or symbolic nature, which seek to inculcate certain values and norms of behaviour by repetition, which automatically implies continuity with the past' (Hosbawm 1983:1). The difference is that these rules and norms are invented traditions, which because they are so overtly formalised appear quite old, while in truth they might only be very recent products. The construction of traditions is taken by these writers to represent the official memory and is articulated through monumental buildings, symbols such as flags and national anthems and commemorative ceremonies and anniversaries.

Another strand of work focuses on the ways that groups and individuals oppose of the dominant ideology and how counter memories are articulated. This is done too from a political perspective, since conflict is a dimension of power or of the lack of power. It shows how social memory is also constructed from the bottom up and reflects the interests and identities of minority groups that distance themselves from the dominant ideology. Hence, collective memory consists of both official versions of the past and competing narratives. The conflictual character of these memories is particularly seen when oppressive regimes are no longer in power and silenced or hidden memories were restrained. On liberation, it becomes clear that a wide variety of identities existed that have a different relationship to the past than the official line (Foucault 1977, Pine, Kaneff and Haukanes 2004b, Watson 1994).

An issue related to the politics of memory issue is the way cultural forms, such as museums, heritage and commemorative sites act as vehicles for the transmission of collective memory, official and contested (see papers in Gillis 1994b, Ben-Amos and Weissberg 1999, Crane 2000). For example, war memorials such as the World War II memorials to the Unknown Soldier serve to justify war, glorify death and enhance patriotism and national identities. Resistance to political ends is exemplified by the 1980's debate in the United States surrounding the composition of the Vietnam memorials (Gillis 1994a: 13, Pine, Kaneff and Haukanes 2004a: 17, Misztal 2003: 130) that addressed the need for an architectural form that would identify and honour the sacrifice of individuals and convey the devastation of war as opposed to a collective memorial to the anonymous soldier. On the other hand, it is acknowledged that obligation to remember especially traumatic events and war and to address past wrongdoings is accompanied by the 'duty to forget' in order for a society to move forward. A recent trend in the sociological treatments

of issues of social memory is the study of trauma and retrospective justice (Ricoeur 2004, also papers in Antze and Lambek 1996), which address among others the politics of justice, amnesty, the damage of 'the excess of memory' (Kirmayer 1996: 190) and at the same time the imperative not only to keep memories alive but to confer them to subsequent generations.

3.5 Transformation and Persistence of the Past

In an almost self-evident way each of us carry our past at every moment, whether this consists of our inherited genetic make up, learned skills with which we became inculcated during development, events that we witnessed during our lifetime, or knowledge about the world that we share with others. The particular ways that we consult the past for the purposes of the present and future are influenced by our participation within social frameworks (Halbwachs 1950) and our socialisation into mnemonic communities. The aspects of the past that people and groups choose to bring into the present are those that are judged relevant under particular circumstances. Therefore, it is the present that shapes the past. This is what the presentist approach that we have seen advocates. It recognises that the remembering is fluid and highly selective but the selection process is not accidental and random nor is it attributed to individual agency. It always concerns the politics of power and is mostly 'constructed' rather than 'constituted'. Although this is verified in a number of instances, critics of this approach note that this is not always the case and that it is wrong to reduce the complex phenomenon of social memory to political manipulation (Olick and Levy 1997, Schudson 1989). In addition, individuals are presented as voiceless followers rather than as active agents. Even if the multiplicity of competing identities is acknowledged as in the case of counter memories, this too assumes that the past is always moulded for the purposes of the present.

Some pasts, however, are persistent in memory, both social and personal, irrespective of power claims (table 2). People adhere to traditions that are passed on from generation to generation without attaching to them any strategic meaning. Shils argues that it is the links with tradition that shape our identity and give a sense of continuity (Shils 1981). Arguing against the view that all traditions are invented he draws attention to the fact that sometimes these are highly resistant to change or obliteration. Keeping and transmitting traditions in this sense are not to be equated with conservatism and lack of

progress but with self-conscious ways of bringing the past into present and providing vital connections between living generations and the dead (Shils 1981: 24-25). At the same time, transforming the inherited past is inevitable, since interpretation and re-workings of meaning occur in the process, hence, people hold on to traditional values and systems of meanings by always making them relevant. Olick and Levy (1997) highlight the need to take into account the constant interaction between enduring images of the past and present needs. They distinguish between rational and mythic logic inherent in mechanisms of cultural constraint and persistence of the past. The former operates by laying down prohibitions and requirements, the latter by producing taboos and appealing to duty and obligation.

Bloch has brilliantly demonstrated these tensions between persistence and malleability of the remembered past in the ethnographic record (Bloch 1996). He presents three cases, each of which exemplifies a different way of 'being in history'. The Sadah of northern Yemen is one of the groups that are considered as the descendants of the Prophet Mohammed. They see themselves as holy vessels of the divine and it is their duty, on the basis of their descent to shield this from the flux of events around them. They avoid the inherent possibility of transformation through learning and practice by appealing to their hereditary status, hence, by believing that knowledge and holiness is implanted *in* them, awaiting discovery, not learned anew. By contrast, the Bicolanos of the Philippines exhibit a great degree of cultural malleability, as a result of colonial domination and of their lack of desire to hold on or to return to the pre-colonial way of life of their predecessors. There is a marked absence of mnemonic objects, such as the religious texts of the Sadah, since the Bicolanos place an emphasis on transformation and becoming through continual negotiation with the a co-existing world. Bloch notes that these two opposing views of the past and the mind do not always appear absolute but some groups find ways to combine both (Bloch 1996, 1998). His third case study comes from the Merina of Madagascar, who take a dual perspective about knowledge, one that concerns practical, everyday matters and is flexible and changeable and another, which concerns the traditions of the immobile ancestors that should be reproduced but not transformed. Their mortuary rituals exemplify these dualities between living and dead, mobile and immobile (also in papers in Bloch and Parry 1982).

Whilst the focus on most sociological studies on memory is the transmission and sharing of the past through public articulation in language and cultural media, the same

notion of persistence and change applies to more private and unconscious domains, namely bodily practices. Connerton says that incorporated practices, where memory of the past is ‘sedimented in the body’ and transmitted through enactment (Connerton: 1989: 72) constitute an important and neglected aspect of social memory and continuity. He refers to habits and unthought routines, such as gesture, posture, table manners that communicate one’s position within the social order and their particular links with the past. Connerton draws on Bourdieu’s notion of *habitus*, which refers similarly to durable, socially infused bodily dispositions that are reproduced within various social contexts. Nevertheless, *habitus* is not static but, while it is ‘a product of history, produces individual and collective practices – more history – in accordance by the schemes generated by history’ (Bourdieu 1990: 54).

	Instrumental/ Rational	Cultural	Inertial	Mythic
Persistence	Self-conscious orthodoxy, Conservatism Heritage movements Prohibition, Requirement	Continued relevance, Canon	Habit, Routine, Repetition, custom	Moral, endogenous, projective, Taboo, Duty/ obligation
Change	Revisionism, Entrepreneurship Redress movements, Legitimation Invented tradition Refutation	Irrelevance Paradigm change, Discovery of new facts	Decay, Atrophy, Accidental loss, death	 Transgression

Table 2. Elements of social memory (information from Olick and Robbins 1998: 129 and Olick and Levy 1997: 925).

3.6 Individual *versus* Society

The way memory operates in different scales and contexts and the way it is immersed in body, mind and society challenges a lot of our preconceptions and epistemological convictions. This is a subject in which one can question the arbitrary separation between individual thinking and social structures and between the internal and external world, with good evidence. Memory of the past runs simultaneously back and forth between the two. Yet, this challenge remains difficult to address under the present fragmentation of

knowledge reflected in the lack of communication between disciplines. We explored above the notion of collective memory as an alternative to the input-output model of the human mind that ignores the interaction of persons and minds/brains with the social and cultural world. However, it is unclear to what extent the concept of social memory as defined by sociological studies of contemporary politics manages to provide a more integrated view. In the standard presentist model for example the behaviour of individuals is determined by power structures; it is rule bound, pre-written and rehearsed through the objectification of culture. As discussed earlier the critique of the computer analogy is based on the inadequate way of presenting a solipsistic image of the human mind, failing to explain where symbolic representations acquire their meaning from and how the human mind reaches an understanding of the external world; issues that present no problem for computer programmers who feed the semantic contents of the built-in addresses of computers. In social theories of remembering the rule writers are clearly identified as the ruling elites seeking to establish their claims to power. Private and public worlds, still remain separate. Technology in the former model stores memories; culture in the latter objectifies them. Both stress permanence and reproduction rather than interpretation and transformation. This is rather a black and white presentation that represents the bulk of the theories of memory that we encountered in our review of the relevant literature but not all of them. More recently, disconcerted critics of both the abovementioned models of memory, from both camps have sought to find middle ways and, as we saw, psychological theories of remembering have begun to direct their attention to 'natural contexts', while social theorists have turned to practice theories, embodiment and subjectivity. Following these insights a more integrated view is adopted. This is mainly achieved by a synthetic and contextual study of mnemonic *practices*: how these are created within contexts of social activity and interpersonal relations, private realms, and active practical engagement with materiality and ephemerality.

An issue that needs to be addressed is the scales of analysis that are appropriate in such a study. Currently, memory studies occupy a liminal position, between the individual and the social, the subjective and the political, the constructed and the constituted (Radstone 2000). Recently, in both psychology and social theories of memory there has emerged a trend to situate remembering at the interface between the individual and the social and to take into account issues of agency, autobiography, gender, culture and activity among others. In archaeology and especially in prehistory such attempts are considerably

more difficult to ground methodologically. The absence of material that would directly associate individuals with archaeologically visible elements, apart perhaps from skeletal material, normally provides the justification for dealing with collectivities, regional groups and political structures. Increasingly, these and other abstractions that present the past as a series of traditions, styles, and stages has been under attack for neglecting the intentions, lives and aspirations of social actors and for presenting a 'faceless' and depersonalised view of the past (Tringham 1991, Bolger 2003, Shanks and Tilley 1987). Issues of social agency and the deployment of suitable temporal and spatial scales are of paramount importance if we want to locate archaeologically the interface between personal and social memory. Between the sweeping influence of political authority and the mentalistic view of cognition, there are constructions of memory and subsequently variable perceptions of the passage of time and what is remembered within the time of generations, individuals and communities, as well as lifecycles and biographies.

3.7 Approaching Memory at a Distance: Present/Past Distinctions

Francis Yates in his seminal study on the art of mnemotechnics in antiquity complained that 'we moderns have no memories at all' (Yates 1966: 3). He contrasts this with the status of memory in classical antiquity. For the ancient Greeks memory was a form of divine power, personified by *Mnemosyne* in Greek mythology, who gave birth to the nine Muses, the patrons of letters and the art. In Platonic philosophy *anamnesis* (the act of recollection) would lead to the recovery of knowledge of the transcendental truth from the soul, while for Aristotle, remembering was an enlightening experience, shaping and transforming a person and retained in the mind as permanent imprints (Coleman 1992). The ability to memorise was elevated to a form of art indispensable from the practice of ancient and medieval rhetoric. But it was also regarded as the noblest of abilities and a part of the virtue of prudence that enables one to make moral judgements. Aside from remembering one's education, in the lack or scarcity of books, the medieval revival of mnemonics, *memoria* (trained memory), was seen as character building, as well as essential in strengthening citizenship and integrity (Carruthers 1990). It is precisely this respect for memory as a social but also deeply personal practice that has disappeared from modern life according to Casey (1987). Apart from the concern of artists and creative writers with remembering, the vast majority of us 'moderns' have substituted the 'art' of memory with a 'collective amnesia

embodied in machine-memory' in our every day lives (Casey 1987: 4). For many writers the electronification of memory as exemplified by our growing reliance on computers is to blame, as it has brought about a devastating devaluation of the process of remembering as an intimate experience. Recounting one's past, once celebrated as the highest form of self-reflection and interpretation in philosophy and literature from St. Augustine to Bergson and Proust (Freeman 1993), has now become 'self-externalised: projected outside the rememberer himself or herself into... the calculative wizardry of computers' (Casey 1987: 2). Other writers have linked this perceived declining prestige of memory in contemporary society with the damaging effects of digital technologies and mass media, which constitute the new *ars memoriae* and have instigated a confused, corrupted memory of 'bits of information' (Caldwell 2000). Thus, mass media now dictate the form of the 'remembered' historical past rather than assist in the critical formulation of historical consciousness. They provide easy access to a wide host of information and their global immanence has eliminated time and distance. Audio-visual devices augment a fundamentally different kind of consciousness of the past. The communicative elements of verbally shared pasts have been lost in our image-fed society. This is not only to be contrasted with the memorisation and oral rehearsal of a mythical past as was done by bards and mnemonists in antiquity, but it is relevant to a much more recent loss of the transmission of stories, memories, and events as an essentially social practice, whether at the level of individual families or whole communities (Casey 1987). The new media have capitalised on the fact that through cinema, television and the Internet the past seem not only more accessible but also more credible. The visual dramatisation of our historical heritage on film gives a sense of immediacy, intensity and relevance to temporally and spatially remote events. (Lowenthal 1985). For some, this can only be a good thing and the cultural heritage industry increasingly relies on interactive media to promote the much sought awareness of what happened in history. But, for the sceptics of new technologies, this overexposure and fascination with all things past implies the loss of a dialectic and critical attitude to history as opposed to the 'authoritative anonymity' of the new media and the illusion that 'the camera never lies' (Lowenthal 1985: 230, Huyssen 1995). They all talk of a memory crisis in modern society.

In reality, however, the voicing of the above and other related concerns over the loss of memory and our 'self afflicted forgetfulness' is symptomatic not of technological advancements or the devalorisation of memory in contemporary society but of the exact opposite. In an age of rapid political and social change making sure that we remember the

past has never been more important from many points of view. The increasing attention on preservation and presentation of the cultural heritage, the proliferation of historical sites, themed parks, and official sites of remembrance, the commercial value of old memorabilia, the recent fascination with tracing one's genealogical roots, the popularity of autobiographical literature are only a few examples of the modern near obsession with memory. This fascination is reflected in the recent revival of interest in the social sciences like sociology, cultural and communications studies and anthropology. Many writers place this burst of interest in social memory within the context of the political upheavals of the twentieth century but also the development of the European nation states in the eighteenth century and the constitution of newly formed national identities that relied on a shared past (Misztal 2003, Gillis 1994b, Kenny 1999, Pennebaker, Paez and Rime 1997, Pine, Kaneff and Haukanes 2004, Radstone 2000, Olick and Robbins 1998). It is within this historical context that objects became 'the means of regaining a cognisance of the past and promised a means to hold on to it' (Weissberg 1999: 8-9). Memory is not only inscribed into the cultural system but is also codified in the economic system, hence, the objects of memory could be traded and have become part of the capitalist system (Ben-Amos and Weissberg 1999). On the other hand, the proliferation of the sciences of memory, the advances in neuroscientific studies and the modelling of the human mind in artificial intelligence are, too, recent developments within an explicitly Western framework. Varela, Thompson and Rosch (1991) argue that artificial intelligence as a powerful social technology has had an amplifying effect and as a result has deeply permeated Western thought by providing 'society at large with an unprecedented mirror of itself, well beyond the circle of the philosopher, the psychologist, the therapist, or any individual seeking insight into this own experience'. Hacking (1996) also places the status of the memory sciences within their historical context and claims that they replaced, in the nineteenth century, the 'sciences of the soul', with the aim to offer objective and scientific opinions, hence creating the illusion that they hold the truth for the human psyche.

The natural question that arises, then, is to what extent can we rely on theories that have developed within a specific historical and political framework to explore prehistoric societies? There is admittedly, a fine line between rejecting all the above theories as unsuitable for archaeology since they are products of Western thought and receding into the view that 'the past is a foreign country', hence they do things differently (Lowenthal 1985, Boym 2001). This is exactly the view that has fuelled the current wave of nostalgia by

glamorising and romanticising a simpler, happier past in stark contrast with the despondencies of an industrial, urban present. (Lowenthal 1985: xxiv). Oral societies in the academic literature of memory, are presented as living in a world of custom, habit and repetition in stark contrast to modern society that is characterised by invariance and the use of tradition for ideological manipulation (Hobsbawm and Ranger 1983). Le Goff (1992) has traced the history of memory as moving from an 'ethnic memory' of traditional oral societies to the documentary culture of Antiquity, the development of liturgical memory of the Christian era, to printing culture with archives and libraries to finally the electronic means of communication that characterise the modern era. The former is said to have contributed to a freer and more creative memory of the past whilst the latter describes a mechanical memorisation of official versions of the past. Similarly, traditional societies are said to conceive time as a cyclical repetition where the past is continuous and adheres to the seasonal rhythms of nature. Visual imagery and oral traditions convey a mythical past but it differs from the historical experience of literate societies in that 'information is conveyed as a totality of impressions without a starting or ending point.' (Farris 1987: 567). By contrast, in literate societies time appears as unfolding along a chain of irreversible events that Goody (1977) attributes to the invention of the alphabet whilst Eliade (1954) places the origins of directional time in the Judaeo-Christian historicity with the narration of events along the continuum of creation, fall, divine incarnation and redemption. With the priority placed upon personal spiritual progress and the notion of salvation, it denies cyclical theories of time (Turtzky 1998: 56).

Nevertheless, as Adam shows, the conceptual dichotomies between cyclical and linear definitions of time are, too, based on Western thought. He asserts that to deny any human societies the ability to transcend their immediate experience goes against an integral aspect of all human life, that of 'rhythmically organised beings' with the ability for 'past and future extension, foresight and planning' (Adam 1990: 134). In this respect archaeologists have a lot to contribute to these debates with their evidence for belief systems, monuments and objects that have spanned vast periods of time and equally for future oriented mentalities and careful planning.

In conclusion, we should be aware of the implications of using models that derive from recent Western thought and use them with caution, as I have tried to do in this chapter. However, as it was shown, the status of memory in each society and each period is not a universal given but it is historically constituted and depends upon certain

circumstances. The mnemonic technologies, although an important component, can be of secondary significance in the transformation of how memory is conceptualised in each society. Carruthers, for example, talking about the enormous status of memory and oral memorisation in the Middle Ages notes that it has nothing to do with writing or printing but with the role that rhetoric plays in society (Carruthers 1990). Taking these observations into account, the only way to explore these issues in the archaeological record is by adopting a contextual and holistic approach that acknowledges the role of social and cultural processes in the way memory of the past was inscribed in material culture, rather than concentrating on isolated examples of mnemonic technologies.

Finally, although it is not unusual for archaeologists to turn into other disciplines for theoretical or empirical support, it is, however, open to criticisms regarding borrowing *real* theories from other sciences and try to 'operationalise' that theory to fit the archaeological data (Yoffee and Sherratt 1993: 3). The only way to counter this criticism is not only to understand as best as we can the phenomenon under consideration but also to take into account the underlying research agendas of different schools of thought, their fundamentally different origins and most importantly their historical and cultural context. This chapter has attempted to do precisely that.

3.8 Conclusions

Whilst all societies and individuals (re-)construct, invent, find ways to materialise, reference, or erase memories of the past in the present, the reconstruction of such issues in prehistoric archaeology is undoubtedly difficult and often tentative. Nevertheless, the study of the role of memory and its modes of transmission in both literate and oral societies has recently been variously employed in archaeology as a valuable interpretative tool, following advances in other social sciences, where memory studies constitute an importance field of enquiry of social and cognitive processes. Despite the vast potential of the subject to enrich our understanding of extinct societies and to shed light on the more elusive concepts such as identity formation, socio-cultural reproduction and cognition, as has been amply demonstrated in historical, sociological or anthropological studies, a valid criticism concerns the often uncritical use of and transfer to archaeological contexts of notions that derive from either historical methods or by methodologies that are characterised by an overt psychological theorising (Herzfeld 2003). The purpose of the discussion in this chapter

was to reflect on such conceptual difficulties by exploring in depth the notion of memory in different disciplines, albeit within the intellectual capacity and the perspective of an archaeologist's point of view, as well as with the underlying aim to consider how they underpin archaeological interests and methodologies (which is discussed in chapter 4).

In the following chapter suggestions about how some of the problems encountered with regard to an extreme polarisation of views between disciplines and epistemological outlooks – individual *versus* society, mind *versus* body, politics *versus* agency, prehistory *versus* the Western present, oral *versus* written etc. – can be potentially overcome by thinking within alternative conceptual approaches that are informed by phenomenological, practice, and agency theories. The aim is to stress the need to move away from essentialist models of the human mind, technological metaphors and restrictive definitions of memory as mechanical storage of information and consequently of regarding inter generational cultural transmission as replication of blueprints (see above 3.3).

An enactive view of cognition will be put forward (chapter 4), where the role of the body and its interaction with the environment is acknowledged. Memory-work is then a process that takes place not inside the head but is distributed in a network that includes material things and technologies, individual actors and their relationships, the constraints of power and politics as well as the social practices through which people articulate individual and collective memories; actively or routinely reference the past; transmit messages towards the future; socialise new members into mnemonic communities; commemorate continuity without excluding transformation; and establish self and social identities.

Chapter Four

The Mnemonic Agency of Things, Places, Bodies and Social Practices

'Nothing is not memorial in some manner; everything belongs to some matrix of memory even if it is a matrix which is remote from human concerns and interests. It might even be that *things can remember us* as much as we remember them...Could it be that 'the hold is held' by things as much as by minds – and by places as much as by brains or machines? Is it possible that remembering goes on, in some fashion, in things and places as well as among human beings?'

Edward Casey 1987, p. 311 (emphasis original)

4.1 Introduction

In the previous chapter I explored some of the prevalent theories of memory that have developed in various disciplines and the influence they have had in the way we approach and think about the process of remembering, including within archaeological thought and methodology. The discussion was kept largely on an abstract level, with the aim of understanding the workings of memory from a cognitive and sociological point of view. However, as shown, it has become increasingly clear that the imposition of strict boundaries between mental processes as internalised phenomena and the external world of material culture and social institutions as independent fixed categories is untenable. The issues discussed in the previous chapter demonstrated how these dichotomies are expressed in the current literature of memory and how most theorising about either cognitive or social memory stems from Western intellectual frameworks and concerns. The aim of this chapter is to explore alternative conceptual frameworks that have developed, partly as a reaction to the dissatisfaction surrounding the various dichotomies between internal processes/nature/biology and their externalisation/culture/society. These deal mainly with notions of agency, embodiment and practice and how these are related to the process of remembering and to archaeological methodologies. The discussion in this chapter is

pertinent to the processes of transmission and the role of material culture, but also to habitual action and the mnemonics of the body that are of equal importance. The process of transmission of memory across generations is akin to two related issues. The first is memorability, or in other words what deserves to be remembered. The second is mnemonic efficacy, which depends on the particular mode and material or other means of transmission.

4.2 Transmitting 'Memorable' Ideas across Time and Space: Brains, Memes and Viruses

In discussing the patterning of the archaeological record in chapter one I suggested the possibility that what survives as a potentially recognisable pattern might have been intended to reinforce memory (see Bradley 2005). However, this is subject to certain culturally and historically specific selection processes. The question arises as to what deserves to be memorable and how its transmission and replication occurs. One of the most well argued scenarios that have examined these questions, albeit from the perspective of a universal psychology rather than culturally specific conditions, are selectionist models generally following the principles of Universal Darwinism. Cultural selectionist models assume that cultural representations 'battle for survival', in the sense of wide recognition and public space, the same way genes do. The process of selection is very similar to natural selection of genetic traits that affect one's reproductive fitness (Dennet 2000). Richard Dawkins (1976) introduced the influential idea of memes to denote the cultural units of information that resemble genes in their process of transmission. Co-evolutionary and dual inheritance theories (Boyd and Richerson 1985, 2001, Durham 1991) also support the view that humans possess a second inheritance system, that of culture. Although cultural phenomena show the same elements required for evolution by cultural selection – variation, habitability, and fitness effects – cultural inheritance is a non-genetic system. Indeed, according to these models, culture is defined as the evolved human capacity to store and transmit information extra-genetically (Plotkin 2002: 142). Still, the processes that affect the survival of certain cultural representations are the same as in genetic inheritance: namely natural selection that results in differential fitness of cultural norms; decision-making based on both genetically and culturally evolved propensities; and prominence of the transmitter, that is biological versus cultural 'parents'. The idea of memes is an attractive concept and

has recently concerned archaeologists (Shennan 2002, Lake 1998, Cullen 2000, Watkins 2002). However, if memes are a kind of memory, in the sense that they hold information, it is not very clear what sort of information they are likely to hold and, if they are competing for replication and longevity, what is the mode of operation? If, for example, pottery is a meme, what exactly is being replicated: the style, decoration, function as a container, shape, social system, technological knowledge, ethnic affiliations? The problem in answering this lies in the fact that memes, as contagious ideas, are considered as independent of context and meaning that can be so variable across cultures. As for their transmission, Dawkins (1976) argues that memes propagate themselves just as genes in a gene pool and that they leap from brain to brain via imitation. Examples include tunes, catch-phrases, ways of making pots, ideas. What is not explained very well is what happens when stored memes become actual when recalled. In the case of a tune, for example, the song will be stored differently in the memory of the hearer than that of the singer. Plotkin argues that the replication then will be messy because 'singer and hearer have different brains, each with a different history and each with different neural networks in different states' (Plotkin 2002: 149).

Along similar lines, Sperber has proposed 'an epidemiology of representations', whereby some representations propagate, effectively invading whole populations. Culture consists of such contagious ideas (Sperber 1996). In particular, Sperber maintains that:

'All the information that humans introduce into their common environment can be seen as competing for private and public space and time, that is, for attention, internal memory, transmission, and external storage...The most general psychological factor affecting the distribution of information is its compatibility and fit with human cognitive organisation.' (Sperber 2001: 41).

Information will be 'memorable' if it either enriches or contradicts the modular organisation of the human mind. Ideas, for example, that are counter-intuitive and violate certain expectations are more likely to be remembered and widely distributed, like in the case of religion and the belief in supernatural entities (Boyer 2001a). The same problems are encountered here. Cultural objects and concepts cannot be viewed outside the cultural and historical system that generated them. In addition, as Ingold has argued, recalling something is not replicating but performing it every time.

'Cookings, story-tellings and whistlings are not representations, they are not traits, indeed they are not objects of any kind; they are rather enactions in the world...Rather the form of the melody or the

story arises and is suspended within the current of the activity itself, situated as it is within an environment that includes me, the listener.' (Ingold 2001b: 144)

These views are based on an innate/acquired, nature/nurture dichotomy that has been criticised as presenting culture and biology as entirely separate systems according to which one is born a biological individual first and foremost and then becomes a social person. Memory is undoubtedly a biological/brain function but its structure is greatly affected by the interaction between mind and world in such a way that it becomes difficult to separate one from the other. However, archaeologists, who are attracted to the idea that cultural evolution follows predictable patterns that are based on 'hard facts' rather than 'fanciful interpretations' (Nowell 2001), have a very specific idea of how cognitive archaeology should be conducted. It should strictly be about patterns and processes instead of 'writing prehistory as tabloid human-interest story' (Shennan 2002: 9). Existential or vitalistic approaches are of no interest for it is no longer adequate to view the past as 'lived experience', nor is it valid anymore 'to see people in the past as the active knowledgeable agents we naively believe ourselves to be' and 'to see all change as the outcome of the conscious choices of individuals with existentialist mentalities walking clear-sightedly into the future.' (Shennan 2002: 9). It seems quite strange that archaeologists are ready to dismiss the importance of context and history in talking about cognitive behaviour, two concepts that have always helped them to understand the diversity of human behaviour across space and time.

4.3 Memory *in action*: The Extended/Embodied Mind

'...a person and a person's mind are not confined to particular spatio-temporal coordinates, but consist of a spread of biographical events and memories of events and a dispersed category of material objects, traces, and leavings, which can be attributed to a person...' Alfred Gell – *Art and Agency*

The remainder of this chapter is devoted to the stance that this thesis takes with the view to provide a more integrated approach that avoids the reductionism of evolutionary psychology and questions the image of a fragmented human nature. The theoretical approach of this thesis follows in broad terms Casey's statement that 'what is memory-laden exceeds the scope of the human: memory takes us in the environing world' (Casey 1987: ix), a view that is fundamentally opposed to the strict internal/external distinction that we saw in the previous chapter and the mind/culture opposition that is implied in

evolutionary explanations of cognition. It is also how I am going to approach the archaeological data and what I believe an archaeology of the mind should take into account. In particular, the term memory networks is introduced, rather than external symbolic storage (Donald 1991), exosomatic memory (Goonatilake 1991), or social frameworks (Halbwachs 1950) because, I think, it describes better the relational nature of memory and the intricate relationships between mind, body, and the world of objects, interpersonal relationships, and culture as a tight unity. What is learned, remembered in the long term and transmitted as a recognisable idea, then, is not a disembodied, disembedded entity or object but something that takes a place in a distributed network. This is not to deny that there exist external structures, like institutions, technologies and objects that act as ‘memory carriers’, but rather to question their boundaries. To make this clearer, I explore below two notions, borrowing from Clark (1997): the extended and embodied mind. The first attributes some form of agency to inanimate objects and explains the paradoxical idea that, as Casey says in the epigraph, ‘things remember us as much as we remember them’. The second notion of cognition, embodied and embedded in the environment, refers to the role of the body in *enacting* rather than storing information, as exemplified in sensori-motor and habitual action, the transmission of bodily practices and skill. Both of these notions are pertinent to how material culture and bodily practices are responsible for keeping, transmitting and transforming the past. These issues have been largely overshadowed by essentialist views of technological capacity, control, biological potentials and limitations. However, in the last few decades both the reductionism of biology and the top-bottom approaches of sociology have been questioned from various academic contexts, and relational models of cognition, behaviour, and memory in particular, have appeared¹⁴.

The mutual relationship between people and material culture has recently been influential in archaeology, bringing philosophical approaches to a new understanding of the archaeological record. J. Thomas (1996), Gosden (1994) and Barrett (1994, 2000) for example, have extensively discussed the relational and temporal nature of material things and social relationships, drawing on the works of various thinkers. In this discussion, my aim is to clarify certain concepts that have a direct bearing on how we approach the subject of

¹⁴ An obvious inspiration for some of these works has been the phenomenological philosophy of Heidegger, Merleau-Ponty and Bergson (e.g. Casey 1987, Clark 1997, Dreyfus 1991, Freeman 1993, Varela, Rosch, and Thomson 1991, Maturana and Varela 1987, Ricoeur 2004), but also the ecological psychology of perception of Gibson (e.g. Ingold 2000b) and practice and agency theories of Bourdieu, Giddens, and Foucault (e.g. Connerton 1989, Burkitt 1999, Butler 1993).

memory in archaeology, rather than to discuss in depth the various philosophical schools of thought. Therefore, the reader is directed to other works for more detailed discussion of the philosophical background of these ideas and their application in general archaeological contexts.

4.3.1 The Extended Mind and the Agency of Objects

At the core of phenomenological approaches is the notion that humans are totally immersed in the world, which is not the product of thought and rationality but is perceived and discovered through our active involvement in it and through our bodily engagement with materiality. The emphasis is put on how we gain knowledge of our surroundings through our dealings with the world rather than within the internal space of the mind/brain (Dreyfus 1991, Varela, Thompson, and Rosch 1991). Clark (1997) takes this view to its logical conclusion by asserting that the boundary between the intelligent system and the world is much more plastic than is assumed by cognitive scientists. 'Wild' cognition, Clark argues, does not function like a floppy disk or a filing cabinet but depends upon a crucial 'coupling' with the body and the local environment. The external structures of notebooks, artefacts and technology are examples of such coupling. They do not exist independently of the person but rather they represent a way of 'scaffolding' the brain and of diffusing human reason across wider physical networks. They play an essential part in how humans deal with the world, respond to problems and find solutions. More than merely complementing cognitive processes by offloading information, they become extensions of persons in such a way that it is difficult to recognise with absolute certainty 'where mind stops and the world begins' (Clark and Chalmers 1998).

'Taken to extremes, this seepage of the mind into the world threatens to reconfigure our fundamental self-image by broadening our view of persons to include, at times, aspects of the local environment'. (Clark 1997: 214).

It follows that if, in some cases, material entities *are* extended minds and if minds are the controllers of activity and consciousness then we have to contemplate the possibility that inanimate objects can act and think too; in other words they have some form of agency. To avoid confusion, there does not exist (yet) a physical object that can think and act like a self-sufficient intentional agent, but rather their agency is acquired through human action and use as well as through their incorporation into the lives of people. In this formulation,

what constitute agency - action, intention and will - is not exclusive to human minds and bodies but rather it is distributed across a network that includes human and non-human entities. Such networks come into existence through the mutuality between people and things, their associations and relationships (Graves-Brown 2000a: 7) rather than the formal characteristics of objects alone.

One of the most innovative proponents of this approach was Alfred Gell. In his book *Art and Agency* (1998), published posthumously, Gell explains that, put simply, things are agents because that is how humans sometimes treat them, like a girl talking to her doll (Gell 1998: 20). The doll does not have the same biological capacities as human beings – and the girl does not believe so either - but rather the object is a ‘manifestation’ or a ‘vehicle or channel of agency’. He gives examples of inanimate objects that become ‘part of the family’ like a family car or children’s toys. From a culturally organised perspective, the social agency of objects is best manifested in the case of animism, which refers to endowing inanimate things with human qualities. Whilst animism usually refers to primitive religions, Gell argues that anthropomorphic thinking does not describe a particular mentality nor does it constitute evidence for the primitive mentality of the idol worshipper or evidence that sometimes people make category mistakes. Thinking that a stone idol, for example, can talk, hear, bleed or perspire is to recognise it as an active social agent but not a biologically living thing (Gell 1998: 121-126). Volt sorcery is another similar example whereby things, like wax idols, are believed capable of inflicting pain onto the person that is represented in the idol. What these examples of the agency of things demonstrate is that although we are used to thinking of personhood and identity as an attribute of the self, there are cases where personhood is distributed across a network that includes inanimate agents (see Strathern 1988, N. Thomas 1991, Chapman 2000b, Weiner 1992).

It is admittedly not easy to think of objects as extensions of mind and self due to the Western tendency to separate mind from matter. However, a number of important works have appeared recently that challenge these dichotomies and demonstrate how material things in some cases are invested with emotional and personal meanings to such a degree that they become hybrid categories. With respect, especially, to technology, some scholars have taken this relationship even further by arguing that humans can never be pure natural entities due to the way they merge with certain technologies, but rather they are seen as hybrid, ‘quasi objects, quasi subjects’ (Latour 1991, Dent 2005). This concept might be easier to grasp in relation to today’s technological advancements, in the way, for example, cars

and motorways can be thought of as extensions of persons in time and space or in the way that computer technology acts as prosthetic memory (Landsberg 1995, Haraway 1991). Nevertheless, this merging of people with things is not the result of modern technological inventions and it is subsequently not exclusive to the twentieth century and the West, but has been in operation since humans began to engage with the material world in a way that allowed these relationships to be formed (Graves-Brown 1995, Knappett 2002, Renfrew 1996). On the contrary, what is most definitely a modern invention is thinking about objects and people as totally separate entities (Latour 1991). The consequences of thinking about material objects as extensions of persons are real rather than merely metaphorical. For example, Latour (1992) gives examples of objects that act as autonomous social agents and have the power of intervening in relationships between people, as in the case of objects that police behaviour like road signs, speed cameras or the 'sleeping policeman' (speed bumps). These objects are invested with moral and legal authority rather than simply acting as reminders of rules. Consequently, the destruction of objects that 'stand in' for people has moral implications like the desecration of memorials and graves; the loss of the notebook/extended memory of an Alzheimer patient (Clark and Chalmers 1998); the burning of wax idols with the intention to inflict pain as in the case of magic (Gell 1998).

4.3.2 The Mnemonic agency of things: biographical and distributed objects

Following this line of thought we can see the methodological implications for an archaeological exploration of remembrance and cognition. Mnemonic agency is attributed to certain objects through their incorporation within the social system and the individual lives of people. This means that we should not always expect to find 'special' formal characteristics that reveal their function as such. Objects, including buildings and structures take on functional roles as memorial devices through their entanglement with the individual autobiographies of people and communities. They can acquire a number of different meanings and values as they are circulated, change hands or become attached to particular persons or groups. The possibility that objects have individual biographies, during which they accumulate successive histories as they participate in the social and economic system, was entertained by Igor Kopytoff (1986). His seminal article was included in a volume entitled *The Social Life of Things* edited by Appadurai (1986) where contributors explored the various ways that commodities and the politics of value are social rather than merely technical (Renfrew 1986). Kopytoff (1986) argued that we can talk of objects as

having multiple life histories that, just like people, are influenced by the cultural system. Things, again like people, can also follow multiple biographical possibilities that a particular society offers as ideals (Kopytoff 1986: 66). The life-history approach to objects has gained ground in archaeology, expanding the kinds of questions that we can ask beside the immediate concerns of typology, substance and function. The categorical separation between people and objects has begun to soften; thus Thomas talks about 'artefacts with personalities', Tringham about 'buildings with faces' and Ingold about artefacts that grow like organic forms (J. Thomas 1996: 149-181, Tringham 1991, Ingold 2001a).

To this end, the work of Hoskins (1998) is most illuminating for challenging a lot of the assumptions that archaeologists make with respect to mnemonic function and the temporality of everyday artefacts. Hoskins conducted research with the Kodi of Eastern Indonesia. Her initial aim was to gather information about their 'life-stories' but she found, to her frustration, that in Kodi society giving direct intimate accounts of one's life is an alien concept. However, people were more responsive when asked about their possessions. Hoskins shows with a number of examples how everyday objects tell the stories of people and how in turn these 'biographical objects' mediate for the person. She notes that some of them are often containers, like the betel pouch, the hollow drum and the funeral shroud, that are given the function of 'memory boxes' 'for holding things inside or...creating anxiety about their capacity to escape.' (Hoskins 1998: 5). The role of objects in Indonesian society is both a story-telling or mnemonic device but also in some cases they become themselves vehicles for the construction of self and identity. We also find again the concept of objects that 'stand in' for persons and act as mediators, invested with moral authority. For example, the burial of certain objects (Hoskins gives the example of the betel bag) in the absence of the owner is a disinheriting or even legal act taken to mean the person's social death (Hoskins 1998: 3). Certain objects are also used to tell the story or archive the past of social groups and their ancestral rights and define their position in the present. The flow of marriage gifts that accord to genealogical norms and ancestral cults create relationships and obligations. Hoskins calls these heirlooms and house valuables that have originated in the past 'history objects' that extend individual biographies and define the collective representation of the past (Hoskins 1998: 10).

These, and numerous other anthropological examples of auto- and socio-biographical objects, exemplify the idea of material things and persons distributed across culturally and socially meaningful memory networks. What I wish to stress with respect to

how these ideas translate into an archaeological methodology are two points; the first concerns form and function, the second, use-life and temporality. The first observation concerns the identification of certain objects as mnemonic or as having some form of social agency. The argument so far in this chapter has been that the boundaries between artificial memory (in the form of material objects and technologies) and mind are not so clear cut but considerably blurred due to the complex ways that objects become entangled in people's life-stories. Excluding writing and historical documents from the discussion and working with the categories of material culture that function as 'history objects', the immediate question is how these become apparent in an archaeological classification. The determination of what an object does based on its formal characteristics is standard practice in archaeology. Whilst it is useful as a heuristic device it can also be misleading, for it creates the impression that artefacts are 'finished' objects starting and ending their lives as single functional designs. The inconsistencies between primary function, recycling and re-use for a different purpose are well known and have been long recognised (Schiffer 1996). However, what still underlies most archaeological classifications is a firm distinction between the practical and the symbolic. Characteristics such as domestic, every-day, ephemeral, undecorated, mundane might be attributed to the former. Symbolic objects on the other hand are given 'special' qualities that differentiate them, such as elaborate decoration, monumental design, expensive or valuable, ritual or religious significance. For the purposes of establishing what acts as mnemonic, excluding notation marks and writing, this distinction is pointless. The very concept of biography attached to material culture means that artefacts accumulate meanings that are possibly transformed many times during inter-generational transmission. The form, shape and design of these are culturally determined and do not necessarily follow conventions of intrinsic value and expense. Turning again to the examples in Hoskins' work (1998), the simple, woven, undecorated, betel bag, worn at all times would not classify as 'symbolic' in an archaeological typology. Its function as a 'sack for stories and souls' and its signification for family traditions, ancestral ties and gender tensions in this case requires prior cultural knowledge. Part of the problem is that in most cases in traditional societies such objects might not be representational. Hoskins characteristically contrasts this to modern society:

'Instead of a betel bag as a sign of the tie to the ancestors, we decorate our homes with portraits or photographs of our grandparents. Instead of a spindle as the idealised bridegroom, we may have a poster of a pop singer...The correspondences between the object and that represented is more often

visual in the examples from Western contexts...while I would argue that it is established verbally (through both formal ritual couplets and more informal metaphors) in the materials I have been reviewing.' (Hoskins 1998: 190).

Bloch (1995) has similarly exposed the difficulties in attempting to 'read' meanings in material culture. The example he uses is taken from the Zafimaniry carvings in Madagascar. Anthropologists had previously attempted to interpret the meaning of the carvings in terms of what the designs represented, like circular designs represent the moon and so forth. Bloch, however, notes that these interpretations were beside the point. The Zafimaniry carvings decorate the wood in certain houses. It is the wood that is important here not the representational designs, for it means that the family living there, and by extension the house 'has acquired bones', meaning that the couple has produced children. The house will continue to grow and become more 'bony'. The carvings signify that process of maturation and continuity, they simply 'honour the hardness of the heartwood' (Bloch 1995: 215).

The same example takes us to the second observation with regards to archaeological methodology, which concerns the use-life and temporality of mnemonic objects. The Zafimaniry house physically expresses the concept of marriage and 'records' the passage of time. The building of the house begins with marriage and the first stage includes just the central posts and a flimsy outer wall made of reeds and mats. The flimsy materials are replaced with vertical pieces of the hardest wood when the couple has children. The idea is that the house continues to harden and grow after the death of the original couple with their descendants taking over. This process, Bloch comments, is never complete; some wooden posts will need replacing but the hardening and transformation will be endless (Bloch 1995). In this case, the materiality of the wood is integral in this process. In other cases, however, ephemeral structures can take on the same roles as indicators of continuity and memory. Objects that are left to decay, buried or ritually destroyed claim the same 'permanence' by creating traces of absent things (Kühler 1987, 1999, Taylor 1993). The important point here is to acknowledge that regardless of the material characteristics, the mnemonic efficacy of material objects goes beyond the life-time of individuals and, similarly, the 'life' of the object continues after its conventional use-life is over, by modern standards.

The biographical approach using the life-cycle concept for material entities has been recently popular in archaeological thought. It opposes the use-life approach advocated by

processual archaeologists, where the emphasis is on changes in morphological characteristics and on the 'traces that formation processes map onto cultural materials' (Schiffer 1996: 15) without consideration for how these changes relate to the actual lives of the people that used them. In contrast, as Tringham writes in relation to the life-histories of houses:

'The life history of the house has a more historical and humanistic significance than the term use-life. It concerns the time aspect – the duration of the house, the continuity of its generations (its replacement), its ancestors and descendants, the memories of it that are held by its actors, the ghosts that are held within its walls and under its foundations.' (Tringham 1995: 98).

While this approach is very valuable, for it recognises the complex interactions between the lives of people and material culture, it is less clear in its assumptions regarding the 'death' of objects. The life history metaphor in this regard can be misleading; objects start their lives with their manufacture until they are destroyed, broken or finished with. Sporadically, archaeologists have commented on the 'finished artefact fallacy' by pointing to the fact that excavation, interpretation and display are processes that continue to contribute to the life of objects, therefore they cannot be regarded as 'closed' events (Graves-Brown 1995, Holtorf 2002). Less attention has been paid to the time between their deposition in the ground and their archaeological discovery. Ethnographic examples show how objects continue to function as 'history objects' after their deposition, burial, fragmentation or death of their owners. Their mnemonic role continues to create relationships with places, people and events. It is important, therefore, to go beyond the life history metaphor as well as abandon our consumerist cultural assumptions.

The way that material culture has the capacity to 'extend' temporally and spatially the memory of people, beyond the confines of biological life, is rather better captured in Gell's notion of a 'distributed object' (Gell 1998). We saw earlier his idea of the 'distributed personhood', where identity and intention are distributed in a network that includes inanimate agents. With the concept of the 'distributed object', Gell explores how personhood and objects are distributed over time and space both in biographical and historical time, and how objects, whether art objects or buildings, prefigure later ones and how these later works are 'remembered as having antecedents of their own' (Gell 1998: 257). The *œuvre* of famous artists is such a spatially and temporally dispersed object, pointing back (indexing) to the originator. Gell argues that whilst these are usually considered as 'complete works' in the sense of finished works, the artistic production develops rather as a

series of a recognisable style, hence they form *lineages*. Each work prefigures a later one and at the same time each work is ancestral to other works in the *œuvre*. Together 'they form a macro-object, or temporal object, which evolves over time' (Gell 1998: 233). Despite the focus on innovation (by the public or art critics), artistic production depends on repetition and quotation, otherwise 'art would lose its memory' (Gell 1998: 233). The same principles apply to more mundane contexts like houses and building extensions that accumulate memories and at the same time are 'protentions towards' later ones. Gell's ideas contradict the archaeological tendency to see all artefacts as 'complete works', expressing the final intentions of their producers. Indeed, the concept of a 'distributed object' sounds very familiar to the archaeological notions of style, traditions and 'cultures'. Here, too, we tend to focus on chronological change and innovation rather than retention of previous elements and we are also inclined to view individual artefacts, buildings or sites as final designs rather than as 'moments of temporal series' (Gell 1998: 233) or as quoting or remembering previous ones. The Three Age system, the technique of seriation and frequency curves are all examples of implicitly emphasising stylistic change, replacement of previous traditions and technological innovation (Bradley 2002: 10-12). Less attention is paid, perhaps, to continuity of certain traditions and the maintenance of links with the past as acts of remembrance rather than as signs of backward or conservative communities.

4.3.3 Embodied memory: skill and habit

'It (habit-memory) is part of my present, exactly like my habit of walking or of writings; it is lived and acted, rather than represented.'

– Henri Bergson – Matter and Memory

If 'distributed objects' that transmit the memory of the past are seen in some cases as strategic actions to maintain ancestral links (Bradley 1998, 2002, Gell 1998: 251-258, Gosden 1994) body memory expresses habitual action that is performed unconsciously, but nevertheless transmits its own messages (Connerton 1989). Connerton drew the distinction between inscription and incorporated practices as two different ways that social memory is formed and passed on across generations. While they both contribute to the transmission and reproduction of the past, the latter is often seen as releasing memory as it is acted out as opposed to the more passive mode of inscription, which stores or entraps information; although this distinction is not always so clear-cut (Battaglia 1992). The body re-enacts the

past at every moment through the performance of skilled actions that have become 'sedimented' into the body (Connerton 1989: 72).

The role of the body and the local environment as central to how human cognition works has recently been at the forefront of cognitive research, partly as a reaction to the cognitivist paradigm and the computer models of the human mind, discussed in chapter 3, where embodiment and action are seen as peripheral. In these works the idea that there exist sharp distinctions between mind and body, cognition, perception and action, mental representations and external facts is abandoned in favour of a holistic approach and an embodied perspective. In these models from cognitive science the mind is seen not as a 'disembodied logical reasoning device' (Clark 1997: 1) but as controller of embodied action. An action-oriented approach to cognition takes into account the bodily interaction of agents with the physical world. Gibson's notion of 'affordances' exemplifies this pattern (J. Gibson 1979). The properties of the environment are perceived as a set of possibilities for interaction with one's body. Thus the meanings and values of objects are understood in terms of the ways they invite and sustain bodily actions; for example a chair affords sitting.

There is support from psychology that this kind of bodily interaction with the environment describes the function of memory. Glenberg (1997) argues that memory evolved in service of perception and action in a three-dimensional world. Survival depends upon knowledge for navigation, avoidance of obstacles etc., which might not require internal representations of the environment or memory. However, what does require a memory system is the differentiation between particular obstacles and particular locations based on the experience of previous interactions. Thus, according to Glenberg, the primary function of memory is 'to mesh the embodied conceptualisation of projectable properties of the environment (e.g. a path or a cup) with embodied experiences that provide nonprojectable properties. Thus 'the path becomes the path home and the cup my cup.' (Glenberg 1997: 4). Remembering the path home is grounded not on mental representation or linguistic instructions but on exploration of the environment and a fit between previous knowledge and embodied action. In addition, psychologists have found that memory for actions is better than verbal commands for the same action. Various experiments have shown that our memory system specialises in embodied information and that our body's structure ensures ease of remembering. For example, experiments have shown that it is easier to remember objects that are placed along the head/feet axis followed by the front/back axis (Bryant *et al* in Glenberg 1997: 5). The art of mnemotechnics in classical

antiquity was based on similar principles. The method of *loci* was one of the most successful methods for training artificial memory for the purposes of rhetoric, which included memorising long speeches. The effective memorisation of vast quantities of information was realised through the impression and manipulation of places and images on memory. Francis Yates in his book *The Art of Memory* (1966), traces the history of such techniques from the classical sources through the Middle Ages and the Renaissance and explains how it was achieved. What one had to do was to place the things to be remembered in a sequential order within an architectural environment. To recall them all one has to do is to mentally walk through the environment and visit each locus. Cicero discusses memory as an integral part of rhetoric and he attributes the invention of the mnemonic of places and images to Simonides. According to the story, Simonides was able to accurately name the bodies of those who were crushed to death due to the roof collapsing while at a banquet, through his memory of the places at which they had been sitting. Cicero in *De Oratore* tells us that Simonides' ability to remember rested on the realisation of the importance of orderly arrangement but also upon the power of sight as the strongest of all senses (Cicero in Yates 1966: 17-23) and the natural ease of habitual movement.

This ease is described in Merleau-Ponty's work (1962) in terms of the 'habit-body', which recognises the unconscious nature of habitual movement and action. He refers to learned knowledge and skills that have become integrated into the body and have 'the stamp of movement set upon it', as in the case of dancing or playing a musical instrument. The bodily experience of movement 'is the motor grasping of a motor significance' (Merleau-Ponty 1962: 165). In this formulation of habit, Merleau-Ponty is interested in diluting the distinction between thought and action and between mind and body. He sees the body as our anchorage in and mediator of the world. Habit memory, then, is grounded in neither thought nor the objective body but expresses 'the harmony between what we aim at and what is given, between the intention and performance' (Merleau-Ponty 1962: 167). He gives the example of typing to illustrate the integration of intention and performance:

'When the typist performs the necessary movements on the typewriter, these movements are governed by an intention, but the intention does not posit the keys as objective locations. It is literally true that the subject who learns to type incorporates the key-board space into this bodily space.' (Merleau-Ponty 1962: 167).

The overt focus on linguistic transmission of information often misses the ways in which knowledge is passed on through practical learning that do not involve language or

language-like propositions. In the anthropological concept of culture as a storehouse of information and as a body of transmissible (public) knowledge through language contexts of practical experience, perception and action are thought of as separate (Bloch 1991). Nevertheless, a lot of cultural knowledge is transmitted in non-linguistic forms, as in the case of practical everyday tasks. These are understood and generated through routinisation, practice and performance rather than language and formal teaching. In fact, practical tasks require knowledge that is non-linguistic in order to be performed efficiently and automatically. Bloch gives the example of learning to drive, which requires the learner to convert propositional knowledge through verbal teaching into practical knowledge in order to perform the task effectively (Bloch 1991). This highlights the fact that competence and skill is acquired and transmitted not as a set of internalised instructions but through *enaction* (Varela, Thompson and Rosch 1991). It contradicts the view of the mind as a container of information ready to be retrieved and the passive role of the body and its senses. Ecological perspectives (Gibson 1979, Ingold 2000a, 2001b) and action-oriented approaches (Clark 1997, Varela, Thompson and Rosch 1991) stress the importance of the 'fine tuning' and sensitisation of the body and the perceptual system to the local environment, and much less the 'filling up' of the mind with chunks of information (Ingold 2001b: 142).

This shift in focus is important if we want to understand the dynamic process of intergenerational transmission and the role of memory in culturally and historically specific archaeological contexts. It is argued here that it is important to counter the tendency in archaeological analyses to view material forms as embodying 'ancestral wisdom' passed unchanged from generation to generation without taking into account how memory of the past is constituted in both thought and unthought embodied action. Material remains such as pots, buildings and tools, as well as time, in terms of relative and absolute dates, are our only means of assessing the subject of memory and its transmission in antiquity. Nevertheless, relying solely on these to infer continuity and discontinuity is to lose sight of the agents' actions, motivations and performances and falls foul of presenting an unpeopled past. There is, however, a logical reasoning behind the correlation between morphological or stylistic characteristics and their constancy or change in time (Bradley 2002: 8-12). The role of material culture in preserving the traditions and conditions of the past is undeniably significant. Similarly, the process of the codification of orally transmitted knowledge in material form, such as monuments or other symbolic objects, does also contribute to the prevention of erosion of memory with time. Studying the amount of time that these material

memories remain stable and the rates of their deterioration and replacement with new ones offers a viable methodology for the exploration of memory in archaeological contexts. Nevertheless, seeing material culture as the container of cultural memory, when it is used as the only source of interpretation of ancient cognition, does also create a paradox. That is, the assumption that memory occurs before the act of remembering which contradicts the ecological and action-oriented perspectives of cognitive science discussed above. In the latter, memory and knowledge is generated through doing – enacting, rather than through passively receiving. Thus, maintaining links with ancestral cultural forms, whether building traditions, pottery designs or ways of life for example, is not a matter of replication or a blueprint but requires a skilled engagement with the environment and the material world, which in turn entails a certain degree of improvisation (Ingold 2000b), without necessarily implying a break with tradition. In other words, an enactive perspective argues that memory is not implanted or imprinted knowledge but generated in practical contexts and retrieved in the way we use our bodies (Glenberg 1997). This kind of habitual memory is essentially performative and involves ‘the active immanence of the past in the body that informs bodily actions in an efficacious, orienting and regular manner’ (Casey 1987: 149).

Archaeologists have recently started exploring the understanding of material structures through embodied action, not so much in relation to remembering, but in more general contexts of bodily experience as being-in-the-world, influenced by phenomenological philosophy (J. Thomas 1996, Tilley 1994, Gosden 1994). Furthermore, theories of social agency have recently been very influential in archaeology and they have addressed the need to consider the role of action and practice as opposed to earlier focus on ‘behaviour’ with its passive overtones (e.g. Barrett 1994, papers in Dobbres and Robb 2002). Feminist theories, in particular, have theorised the multiple and competing gendered construction of the body and the performativity of gendered identities and have had an immense contribution to ‘peopling’ archaeological narratives as opposed to earlier writings of prehistory as ‘faceless blobs’ (Tringham 1991, Gero and Conkey 1991). Within these perspectives, it has been argued that the difficulties, but also the reluctance of archaeologists to recognise agency in the archaeological record stem from the well established conviction that there are certain constraints in terms of what the archaeological record allows us to infer, namely the lack of physical traces that could be used as concrete evidence, which also applies to conducting cognitive research as discussed earlier. On the other hand, treating the notion of social agency as material representation in the patterns of

the archaeological record is to define it in terms of its (material) consequences, which Barrett argues is the wrong starting point and expresses 'the intellectual failure to engage with the data in a sense that confronts real conditions of history' (Barrett 2000: 63). By this, he means that agency is historically constituted and also embodied, therefore not an object or a force to be discovered or represented. It is constituted in practice, in the active interaction and engagement of people with each other and the material world. It is also constructed in reconfiguring an understanding of the world based on the available 'stocks of knowledge' and confronting, incorporating or transforming the 'debris of history, material and traditional.' (Barrett 2000: 67). An important element of what Barrett calls the knowledgeability of actors is the discovery of that knowledge 'in ways of seeing and feeling and in ways of moving and acting' (Barrett 2000: 65).

The mnemonic agency of the body, defined as unintended, unreflective knowledge contradicts the foundations of the presentist accounts of social memory, discussed in chapter 3. In these, memory of the past is used instrumentally for the political purposes of the present, as in the inventions of tradition approach (e.g. Hobsbawm and Ranger 1983). This view presents social agents as belonging to two separate segments of society; they are either voiceless followers of traditions imposed from above or political strategists who seek to secure their claims to power by appearing as keepers of the past. In these cases, the object of memory pre-exists the spontaneous act of remembering, and indeed the appearance of traditions as given and old is the purpose of it all. An antidote and critique to this approach comes from practice theory and specifically from Bourdieu's well-known notion of *habitus* (Bourdieu 1990). A major aspect of Bourdieu's theory of practice is to show the dialectic relationship between thought and unthought action, intentionality and unintended consequences. A theory of practice advocates an active apprehension of the world and views objects of knowledge not as passively recorded but as constructed in practice. The notion of *habitus* (a term combining *habitude* and *hexis*) is the main principle behind this construction. In Bourdieu's famous definition *habitus* describes the

'systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, principles which generate and organise practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operation necessary in order to attain them' (Bourdieu 1990: 53).

These dispositions, according to Bourdieu, although not excluding the influence of strategic intentions, are primarily performed and regulated without presupposing the existence of a

conductor or the imposition of rules. Neither are they conscious cognitive acts, but rather they are socially instilled permanent dispositions, like 'a durable way of standing, speaking, walking and thereby of feeling and thinking' (Bourdieu 1990: 70). *Habitus*, in other words, is a kind of second nature, common sense and embodies a practical sense that parallels the notion of 'a feel for the game'. As such, it is the outcome of past experiences and the anticipation of the future, enabling agents to cope with new situations. Bourdieu places the body at the centre of practical knowledge and understanding, rather than mental reflection. Practical belief is essentially enacted, embodied belief, not a state of mind, which is 'instilled in childhood learning that treats the body as a living memory pad' (Bourdieu 1990: 68). However, the body does not memorise the past in a mechanical mimetic fashion but it enacts the past. This kind of bodily memory is not something that one possesses but something that one is (Bourdieu 1990: 73).

While Merleau-Ponty also recognises that the body, in the form of habitual action, gives to our life 'a form of generality, and develops our personal acts into stable dispositional tendencies' (Merleau-Ponty 1962: 169), he does not pay attention to the social and historical nature of these dispositions. Bourdieu (1990), on the other hand, makes explicit reference to the way that people's habitual dispositions express social conventions. In particular, social relations of power, moral codes and class relations are embedded and tend to reproduce the social system in bodily postures, gestures, and tastes. People, however, are mostly unaware of this process. The transmission of memory through such incorporating practices not only occurs informally and unconsciously but is also culturally specific, variable, and always ambiguous. Connerton distinguishes between three kinds of body memory: techniques of the body such as gestures, proprieties of the body, such as table manners and rules of etiquette, and ceremonies of the body, such as the ceremonies of privilege and title of the French court. All these, Connerton shows, are bodily practices that sustain and transmit social memory as well as reproduce a social order and a social classification (Connerton 1989). An important point that concerns social reproduction is the role of socialisation of children and their incorporation into the social conventions.

4.4 Early Memories: The role of socialisation

Socialisation, the process by which children are introduced to the social and cultural environment in which they are born, is where biological inheritance diverges from cultural

heritage the most, contra to claims by evolutionary psychologists. Research on children's development shows that human cognition develops in ontogenetic time as children become enculturated in their environment through formal and informal instruction, rather than given at birth (Tomasello 1999, Torren 1993, 2001, Vygotsky 1978). According to developmental psychologists, the mechanism that allows cultural learning and social cognition is the development in infants at around nine months of age of 'joint-attentional behaviours' that indicate that they recognise other persons as intentional agents like the self, which is a unique trait of human children and allows them to learn from and interact with others (Tomasello 1999). Between the age of three and five children acquire deeper social and physical knowledge through their interaction with other minds and the accumulated histories of cultural objects. In particular, they understand social-psychological objects – persons as moral and social agents – and physical objects – in terms of causal and quantitative aspects (Tomasello 1999).

The processes by which cultural knowledge and practical skills are transmitted to children vary across cultures. Western attitudes to education, for example, tend to give primacy to verbal, formal and direct instruction, whilst in non-literate societies teaching might be based on practical demonstration of skills and imitation. However, ethnographic examples show that in most cultures there is a combination of both forms of cultural instruction. Formal cultural transmission involves the direct instruction of youngsters by elders of practical tasks and knowledge that is valued as important in the specific cultural system. This includes sustenance tasks but also memorising ancestral genealogies or historical hallmarks. Indirect acquisition of knowledge also occurs as children discover the intentional affordances of objects through their sensori-motor system (J. Gibson 1979), or as they are watching and imitating adults in performing certain tasks and also as they develop a sense of meaningful communication through gesture (Tomasello 1999). In the process, they develop a unique view of the world they live in, which might entail transformation, misunderstandings, and resistance to what has been learnt from elders. Thus, children are not passive receivers of information given by adults but rather they have to constitute their own understandings and meanings. In this sense, they are 'producers of their history and its products' (Torren 2001: 157).

An important dimension of socialisation is the introduction of young members of societies into the collective memories of the group. Halbwachs has explored the role of the family memory in generational continuity and has argued that generational inheritance is

the foundation of social stability (Halbwachs 1926). Sociological studies of social memory stress 'mnemonic socialisation' and the mechanism of 'sociobiographical memory' as paramount in establishing one's identity (Zerubavel cited in Olick and Robbins 1998: 123). There is a distinction in this sense between appropriated and personally acquired memories. The former consists of the memories of historical events that a society values as constitutive of its identity and are transmitted with the same intensity as if they were personally experienced. To a certain extent what is remembered and what is to be forgotten is decided in terms of social values and norms. Psychological studies show differences among different cultures, for example, but also differences across gender and social classes, in the way memories of events are experienced, especially by children and young adults. Pillemer (1998) notes that in individualising societies that stress individual autonomy autobiographical memory is recognised as a form of personality forming in contrast to societies with a more collective ethos (Pillemer 1998). Appropriated memories are also transmitted and acquired through bodily practices, as mentioned earlier that express certain social conventions and reproduce gender and class differences and the social division of labour (Bourdieu 1990). On the other hand, the sociological notion of generation as a distinct historical unit that drives change is based on memories of personally experienced events in the formative years of development. Belonging to the same generation, apart from belonging to an age group means that persons have been exposed to the same historical and political events and memories of these have shaped their identities, which might differ from that of their predecessors and lead to generational clash. In particular, the period of adolescence is when youngsters develop a personal outlook based on their experiences. At this stage encounters with the social world become 'the historically oldest stratum of consciousness, which tends to stabilise itself as the natural view of the world' (Manheim cited in Misztal 2003: 85).

4.5 Reflections: Memory in Practice

'Men make their own history, but they do not make it just as they please, they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past.'

- Karl Mark – The Eighteenth Brumaire of Louis Bonaparte. ¹⁵

¹⁵ Quoted in Dobres and Robb 2002: 5.

The purpose of the above discussion of the notions of the extended and embodied mind was to show how the boundaries between internal/natural/individual and external/artificial/social concepts of memory and the awkward dualisms they create between mind and culture can be overcome by alternative theories that promote a relational view of cognition. A critical evaluation of these issues was considered important in order to give us a better position in approaching the archaeological material and in formulating questions about the processes of memory and its correlation to continuity and discontinuity in the best possible way. What emerged in the course of this review and in particular from action-oriented, agency and practice theories was that the formation and transmission of the past from the perspective of the workings of memory are multi-layered activities that cannot be reduced to a single cognitive or material aspect. Remembering and the transmission of the past cannot be understood outside the context of practice. The way the past was accessed in pre-literate contexts was not only through a straightforward mechanism of accurately retrieving compressed information stored in some form of material culture in a way that approximated writing. Moreover, the way memories and traditions were transmitted from generation to generation did not involve mechanical replication of form or the diffusion of discrete cultural units of information, that is memes (Bloch 2000). Memorability and constancy are neither innate qualities nor intrinsic properties of technologies and objects but are themselves constituted in the practical everyday engagement of people with the material world, in intersubjective relationships and in routinised embodied actions. In turn, the mnemonic efficacy of these practices should be apprehended in terms of the culturally and historically specific conditions rather than in essentialist notions of technology or universal nervous systems.

If these observations steer us towards a more appropriate view of cognition and memory, then it follows that looking for direct analogies or storage of mind in material culture or some form of a concrete and formal material representation of acts of remembering in the archaeological record is misguided. As noted earlier, archaeological reconstructions proceed through a logic of methodological materialism (Hawkes 1954). Our inferences must be made on the basis of material remains. This is necessary and valid, so long as we do not conflate the consequences of processes with the processes themselves (Barrett 2000, Barrett and Fewster 2000) or assume that the function of material culture pre-exists the cultural reality of which it is part. It is argued here that 'history objects', places of

memory and symbolic devices are given that role through their participation in the everyday lives of people in the short term and their incorporation in history in the longer term. In line with the arguments of the previous section, memory as a psychological and socio-cultural attribute is viewed as distributed across a network that includes human and non-human agents, discursive and non-discursive practices, strategic and routinised actions, accepted and disputed meanings. In order for us to gain insights into the 'places of memory' we have first to explore the practices and actions that constituted them, and not the other way around.

This requires a detailed contextual approach that looks at the wider social, cultural, and economic context in conjunction with the physical context. In other words, it is not enough to simply identify a specific material as mnemonic or to break the code that is held, outside their contexts of use and deposition. Furthermore, we could be learning more about prehistoric 'minds' and memory systems if our intentions were not restricted by placing or proving the existence of the 'earliest' instances of mnemonic (non-written) technologies in evolutionary stadial terms; and this is not to deny that it is important that the oral/written divide and the ethnocentric inferences about the mentality of ancient and modern cultures is overcome. Two examples of archaeological analysis of prehistoric mnemonics illustrate my point. The first is the analysis by d'Errico (1998) of Palaeolithic marks and the second comes from Lillios' (2003) study of Iberian engraved plaques; both are using the insights of Marshack's analysis (1972) on notation marks. D'Errico, although he recognises the ambiguities of the archaeological record and the polysemic meanings of symbols, identifies the first examples of AMS (artificial memory systems) in the Upper Palaeolithic. His study involved the detailed microscopic morphological analysis of notched bone objects and his results show an increase in striations at the end of the Upper Palaeolithic, which he interprets as an increase in the volume of stored information and a change in the cognitive ability of populations. There is limited mention of the contextual associations of these objects and there is no attempt to delineate what the information stored in the objects might have been. Lillios' study of the compositional structure of late prehistoric Iberian engraved plaques shares the same underlying aims of 'deciphering' the objects in question, which she interprets as memory aids, and of proving that pre-literate people were not memory challenged. On the basis of this analysis, she concludes that the slate plaques constitute 'the earliest evidence for heraldry in the world' (Lillios 2003: 130). However, Lillios' careful contextual analysis goes beyond this and sheds light on some interesting aspects of how

these objects participated in the wider social and cultural system, although perhaps not fully explored by Lillios. Hence, the plaques are interpreted as recording genealogical information about individuals and might offer the possibility of shedding light to aspects of a more detailed history of lineages, kinship and marriage patterns. But, she also notes the curious fact that these memory aids were buried in graves, which defeats the purpose of elaborate codification systems. Lillios suggests, on the grounds of the wider social conditions, that their context of deposition might express a form of control of collective memory and create social inequalities. These two studies point to perhaps different interests of archaeologists and sometimes these are dictated by the chronological span of the research, as the tendency to associate cognitive research with hominid evolution shows. But they also illustrate the value of going beyond the functional and 'code breaking' stage.

Chapter Five

Methodological Procedures for the Study of House Biographies and Repeated Practices

5.1 Introduction: Studying the Passage of Time

The methodological procedures and analysis of the data sets address directly the issues of continuity and discontinuity as is evident from the relationship of houses to a location over time. The aim is to record and study the 'life histories' of the houses, in each site, in as much detail, as their excavation and published stratigraphy, allows. A series of case studies, all from prehistoric Cyprus, from different periods and regions, comprise the sample. In summary, the architecture from these sites is recorded and analysed **vertically** in terms of

- a. the houses' individual stratigraphic sequences, with the view to delineating their relationship to earlier and later building activity on the location,
- b. their patterns of replication or displacement over time which would help us establish their 'ancestry' and longevity,
- c. the details of each stage within their life cycle, including episodes of abandonment and post-abandonment by means of describing each house in terms of the sequence, number and characteristics of a series of episodes.
- d. the contextual associations in each stage of their life cycle

Combined with the vertical examination, houses are investigated **horizontally** in terms of **a.** their physical characteristics; materials, use of space, features in each phase of their life cycle and **b.** their entrances and orientation with the view to establish their relationship with other houses or features as well as with the outside/public space of the community.

5.2 Research Parameters

Certain **research parameters** have been set as a general guide to the analysis and interpretation of the selected settlement data-sets and they concern the following:

- **Multi-scalar frames**

At the core of a practice-based approach that is adopted here is that such *memoryscapes* as architectural spaces, houses and landscapes are the products of human action and as such are always in the process of 'becoming' (Pred 1984), that is, places, like people, go through life stages. As previously emphasised, the subject of memory and the ways individuals and societies materialise different kinds of memories, and construct different kinds of histories has to be approached from a multi-scalar perspective. *Memoryscapes* are created and transmitted through intentional or unreflective actions and through material or ephemeral media. Routine behaviour in daily practices, formal or informal rituals, bodily movement, but also repetition of house plans on the same location, public monuments and ancestral commemoration are only a few examples of this variability. As was discussed, memory cannot be scrutinised as an exclusively individual or social mental function. On the same accord, an archaeological study of place-memory cannot be restricted to long-term, 'visible' continuities, but has to take into account the scale of the every day as well as that of the generation, as the very definition of the concept of biography would require. Nevertheless, the creation of biographies and identities are never unaffected by a more distant past, nor are they isolated from a wider social network; for instance, cultural customs, social norms, traditions, and ancestral myths that penetrate daily life.

It is paramount, therefore, that these observations are reflected and more importantly, serve as a guide to the selection of the scales of resolution in archaeological analyses. Following Tringham's call for a *multi-scalar* interpretation (Tringham 1995: 94-6) and its application to the study of architecture (Joyce 2003, Joyce and Hendon 2000), the research questions and analytical procedures in this thesis are framed accordingly, at different spatial and temporal scales that include the short scale dynamics of houses in generational time as well as the *long-durée* of communities over time and across the landscapes. The methodological procedures that bring to the fore a multi-scalar attempt of analysis are shown in the use of the following scales of resolution: the analysis of the case studies is largely conducted at the micro-scale, taking into account issues of artefactual deposition and stratigraphic sequences; the patterns of replication or displacement of individual houses combined, show us the contribution of individual domestic groups to the overall development and growth of the community over time; the house is taken as the smallest unit available for archaeological reconstruction, between the individual and the community; the utilisation of the landscape, in two micro-regions is explored with the view

of identifying long term continuities or disjunctures of memory of place (Meskell 2003). Lastly, an overview of inter-site and diachronic comparisons, afforded by including such a long time span of approximately five millennia, is attempted as a way of a synthetic review of the evidence.

- **Levels of analysis**

The sample available for analysis comprises: excavated settlements with substantial exposures of well preserved upstanding architecture of dwellings; with more than one phase of occupation; the stratigraphy and sequence of which have been published in detail and in a final report (table 14). As an exercise in conducting a multi-scalar research I have chosen to work with four case studies at a more detailed (contextual) level of analysis, that is on the micro-scale which would allow us to focus on the details of the life histories of individual buildings including their stratigraphic sequences (termed episodes here) and their artefactual assemblages in each stage of their life course (see below 5.4, 5.5). The remainder of the sites that meet the above mentioned criteria are subject to a coarser (stratigraphic) level of analysis that focuses on the replication patterns of houses over the duration of occupation on a given settlement.

- **Geographical and chronological framework: selection of case-studies**

All the case studies are taken from the excavated settlement record of prehistoric Cyprus covering roughly the period between the Early Aceramic period and the Early/Middle Bronze Age (tables 14, 15). As it was discussed earlier (chapter 1) this is not an obvious choice given the lack of deeply stratified sites on the island and the limitations associated with the biographical study of houses in horizontal sites (see below 5.3 and Tringham 2000). The juxtaposition of the mnemonic practices that 'take place' in the latter with the vertical superimposition that typifies the characteristic settlement type, the *tell*, in other parts of eastern Mediterranean and the Balkans, however, introduces a much needed perspective in the study of place-memory that acknowledges the diverse and multi vocal nature of different *memoryscapes*¹⁶. From a local point of view, the focus, in this research, is on individual communities and their 'internal' details of development, growth, remembrance or disjuncture; that is to say, on the domestic landscape and the patterns of daily life, variably preserved in the archaeological record, as opposed to cross-cultural comparisons with other sites outside Cyprus or issues of transmission and transfer of forms and ideas

¹⁶ adding to Tringham's list of the, fundamentally different, material correlates between flat and tell sites that exemplify the variable ways of the 'memory-making of places' (Tringham 2000: 130, figure 6-5, 131, see also below, chapter 9: tables 11-12).

from other areas (e.g. papers in J. Clarke 2005) although, clearly, in some cases these are an integral part of the construction of histories by the island's communities. The exclusive focus on Cyprus is not intended as an acceptance of older views of island isolation (e.g. Held 1993) or to deny the importance of contact and migration in the formation of identity (Broodbank 2000) that, in essence, creates a sense of memory as distance rather than as time past (Helms 1988). Instead, it is aimed at facilitating present and future research comparisons between a unified body of data (Cypriot prehistoric settlements) with the generic type of the *tell* rather than with individual cultural horizons or specific settlements in the world surrounding and influencing Cyprus.

Four sites have been selected for the detailed (contextual) level of analysis: Kalavassos-*Tenta*, Ayios Epiktitos-*Vrysi*, Kissonerga-*Mosphilia*, and Marki-*Alonia* (henceforth *Tenta*, *Vrysi*, *Mosphilia*, and *Alonia*, respectively)¹⁷. Presentation of the results is arranged in chronological order in such a way that each chronological period is explored at different spatial and temporal scales and includes different levels of analysis. This is by no mean an exhaustive review of the archaeology of such a long time span. Moreover, the case studies have been selected, among other sites that meet the general criteria mentioned above, for different reasons, each bringing a different issue to the fore. These will become clearer in the course of the data presentation, but, briefly, they concern the following: The Early Aceramic site of *Tenta* is included in order to take advantage of the recent full publication of the site and the revised chronology (Todd 2005) that places it before the better known and much discussed Late Aceramic site of Khirokitia-*Vounoi*. The lack of complete vertical excavation of architectural units and the stratigraphic problems associated with excavation, preservation and the reluctance of the excavator to provide a full interpretation of the sequence of individual houses, beyond descriptive accounts, illustrate the limitations and the need to include the concept of house histories in the field and in collating data sets for presentation in site reports.

The Ceramic Neolithic site of *Vrysi* is peculiar in many ways, since it is the only, known, site that defies the typical horizontal displacement of other roughly contemporary

¹⁷ Most archaeological sites in Cyprus are referred to by a double name, the first describing the general locality, which normally coincides with the name of the nearest village, and the second is a toponym, in italics, which gives the more specific location of the site. Usually, the toponym takes its name from topographical or other features in the landscape. It is standard practice to refer to sites using both terms, as in some cases there are more than one archaeological sites on the same locality and only the toponym differentiates them, e.g. Kissonerga-*Mosphilia*, Kissonerga-*Mylouthkia*. Most sites though are often known in the archaeological literature, by either the locality or the toponym and these conventions are largely followed here.

settlements and exhibits characteristics of almost an 'inverted' *tell* (see below, chapter 6). This semi-subterranean settlement on the northern coast of the island provides some of the best preserved architecture of this period and although it spans no more than 300 years of occupation, the unprecedented superimposition of its buildings gives us grounds to contrast the repeated practices across the Neolithic landscape. Despite the abrupt cessation of the post-excavation study by the political events of 1974, the site report provides adequate contextual information (Peltenburg 1982b).

The Chalcolithic site of *Mosphilia* has been selected because of its exceptionally long occupation and wealth of architectural evidence. In addition, the site report represents one of the first examples, within the published archive of excavated Cypriot sites, of incorporating micro-scale theoretical perspectives, such as depositional patterns and spatial configuration of dwellings and extra mural space, into the research design and publication (Peltenburg *et al.* 1998). The excavator's attention to detailed contextual and stratigraphic information, applied to all aspects of the *Mosphilia* record, from the description of the architecture to specialists' reports facilitates the kind of research that is attempted here, notwithstanding the problems associated with shifting occupation and displacement as well as with limited horizontal exposure in excavation.

The same quality of published data and research design are amongst the reasons for selecting the Early/Middle Bronze Age site of *Marki*. The second volume with data from the more recent excavation seasons has only recently appeared in print (Frankel and Webb 2006a). The site report introduced a revised assessment of several aspects of the settlement, including the phasing of the multiple occupations on the site, as well as adjustments to previous documentation and research design of the project. Frankel and Webb (1996, 2006a) have paid close attention to issues of site formation and abandonment processes that proved critical in establishing the life histories of houses and allowed them to offer an interpretation of the complicated and confusing stratigraphy of individual units that had been arranged accretively to form distinct compounds-households. Their focus on the micro-scale, particularly, describing each architectural unit through a sequence of a series of episodes, which allowed them to reflect on issues of household composition and their inter-connecting histories, is considered exemplary in the way site reports are presented. In addition, their decision to make the excavation's databases available electronically has greatly facilitated the manipulation of the data for the purposes of research. Equally important, it also allows researchers that do not have first-hand experience of excavating on

the particular site to further comprehend, not only the structure of the site and the data sets, but also the excavators' way of recording, thinking and understanding the site they excavated, given our reliance on the original interpretation of stratigraphy made in the field.

From the above observations it is clear that these sites are not taken to 'speak' for the entire cultural horizon they belong to and indeed it is this variability and diversity in domestic and social practices that characterise the archaeology of Cyprus. A series of further case-studies are also included in this thesis, on a more general level of analysis that allows consideration of issues of house replacement and place-memory synchronically and diachronically, in a more holistic manner, beside the analytical level of 'the case-study'. Finally, due to the differences between field traditions and analytical tools that excavators have used in different sites as well as due to their diverse research agendas and theoretical convictions, it has been challenging to maintain a consistent procedural and analytical approach. However, some unifying principles have been applied and these are discussed in the remainder of this chapter.

5.3 *House Ancestry and Patterns of Replication* (table 18)

Each building is studied with regard to its stratigraphic relationships with traces of activities that pre-date and/or postdate its construction. This evidence is evaluated in terms of contextual associations, such as portable objects and features that belong to these phases, degree of 'disturbance' or 'residuality' as well as the chronological implications. Each building then is assigned to a category, accordingly: *Founder, Repeated, Enclosed, Continued* or *Displaced House* that sums up these relationships (see below and table 18 for definitions). These categories constitute the basis for a series of observations concerning the patterns of replication that are found on a site and, together with the internal phasing, we can begin to address issues of continuity and discontinuity. At this stage the focus is on the development of the community and its *organic history* as a whole (Tringham 1995: 89) in *generational time*.

The devise of such a procedure was largely inspired by Bailey's analysis of Ovčarovo, and his discussion of the 'living houses' of the Bulgarian Chalcolithic period (D. Bailey 1990). Ovčarovo is a *tell* site that, before excavation, stood 4.5 m high. Thirteen successive horizons were identified and on this basis, together with their accompanied radiocarbon dates, Bailey was able to study the life-spans of each house through the vertical horizons.

He found that certain houses were rebuilt in the same location, hence, surviving into the horizon succeeding the one in which they were initially constructed and occupied. He calls these buildings 'repeated houses', if they are found to repeat the floor layout and wall lines of the previous ones. He then goes on to postulate the existence of generations of houses on the site, each of them belonging to a generation of *house ancestry*. Bailey's methodology and re-interpretation of the site is a rare example of the potential of the biographical approach that is applied in this thesis. By examining the life histories of buildings, as these continue through the ages and do not end with their abandonment, he goes a step further, acknowledging that buildings are constitutive of social relations and integral to the development and continuity of a community. One criticism, however, is that, despite the use of language such as 'the living house' or 'houses surviving the horizons into which they were born' (D. Bailey 1990: 29, 30), he does not reflect on their meaning as part of the living world of the inhabitants, beyond the use of metaphors, nor does he hypothesise on how these 'living houses' were perceived as mnemonic or biographical objects¹⁸. Nevertheless, his analytical strategies are very relevant to the scope of this thesis and have been used as a starting point rather than direct application, due, mainly, to the differences between the two sets of sites under examination. Indeed, similar explorations of continuous house space has been concentrated on *tell* sites (Steadman 2000, Hodder and Cessford 2004, Pfälzner 1996, Banning and Byrd 1987, Chapman 1990, 1997, Düring 2005) and much less on flat sites, even if there is evidence for multi-phase occupation in many cases in the latter (but see Tringham 2000, Stevanović 1997).

The Cypriot settlements that are studied here are horizontal or flat sites, as are all prehistoric sites on the island. We can rarely talk of contemporaneous horizons of occupation and although some sites, such as *Kissonerga-Mosphilia*, or *Kalavassos-Tenta*, are long-lived, spanning thousands of years, they are not continuously occupied. Similarly, most sites do not have destruction horizons that are observed site wide. Their phasing is rather an arbitrary division of time based on the conventions and generalisations of the periodisation of Cypriot prehistory. The phases that are represented in each site describe groups of building episodes rather than contemporaneous building horizons. Correct and detailed stratigraphic analysis, therefore, is paramount in establishing the internal sequence in a given site, as is the collection of multiple samples for radiocarbon dating from stratified

¹⁸ Tringham has criticised Bailey for failing to fuse his data analysis with questions of place and *home* rather than taking a step back and 'normalise' past experiences according to horizons and general trends (Tringham 1995: 88-89).

deposits within buildings. However, these prerequisites are not always viable; most architectural evidence is identified in limited exposures that are located in different parts of the settlement area, hence it is not always possible to connect them stratigraphically in a single sequence with any degree of certainty. Another limitation that posits additional difficulties in investigating continuity and place memory in sites where horizontal displacement is the characteristic pattern of occupation, concerns the preservation and excavation bias that especially affects the earliest and uppermost levels within buildings.

Given the abovementioned limitations, it is understandable that current research on the biographies of houses and on issues of continuity, longevity and genealogy has concentrated on the better preserved, superimposed, occupation strata within the clearly defined boundaries of *tell* settlements. This preference, however, must be seen in the context of methodological viability rather than as a real difference in the way place and continuity were perceived in the past. Consequently, in order to highlight the diversity in mnemonic practices observed in the settlements under investigation, and for the sake of consistency in describing different sites, five broad categories of replication types have been devised as an indication of the patterns of replacement and how this affects house ancestry within the life-course of a community¹⁹. They are as follows:

- ***Founder houses***

refer to the earliest buildings on a site that appear to have been constructed in natural. Note that this is reserved for the houses of the first phase of occupation. Structures that were built above natural but belong to subsequent phases are termed displaced.

- ***Repeated houses***

refer to buildings that are built or rather re-built on the exact location of previous buildings, whether there is a break in occupation or not. The variables that are taken into account here are wall arcs and floor layouts. They are repeated houses if their wall lines follow those of the previous building at a significant enough level (over 75%) and their floor arrangements, including the position of fixtures and especially the hearth as well as the range of activities, have not been significantly altered. A sub-type within this category is that of the *repeated/altered house* with the view to examine at a finer scale the superimposition of floor

¹⁹ The analysis is limited to the chronological scope of this thesis. More work should be undertaken in order to evaluate how these sites figured in the imagination and narratives of later periods, both prehistoric and historic as well as in the construction of modern identities and issues of cultural heritage (e.g. Given 1998, 2000, Holtorf 1998, 2002, Hamilakis and Yalouri 1996).

horizons. This type refers to structures that were built on the exact same location as the category of repeated houses, but their use of space is significantly modified. The position of the hearth and other major fixtures as well as the location of the doorway are again important variables as is the range of activities as, and when, they can be inferred from objects and features.

- ***Enclosed houses***

refer to structures that repeat the location of previous structures but the position of their walls is not exactly the same as with repeated houses (less than 75%). Instead, the alignment of the walls of the later buildings is such that it encloses or is enclosed/contained by the area of the earlier building.

- ***Continued houses***

refer to a. structures that are built above traces of earlier activities such as negative features, burials etc. and b. to structures that their walls clearly overlap with earlier ones but no other clear pattern (e.g. repeated or enclosed) can be discerned.

- ***Displaced houses***

refer to structures that do not incorporate any features or activities of the previous occupations and appear to be horizontally displaced. Note that this refers to later phases, otherwise the structure falls under the founder category. A sub-type of this category is the *displaced/continued* house that is noted in several cases. It refers to horizontally displaced buildings that are added to existing older structures and connected to them by means of adjoining or cross-walls.

The assignment of the above replication types to buildings, based on the available information, regarding their stratigraphic associations is not without problems. Ideally, a site would have to be completely excavated, at least vertically, and on a substantial enough exposure, horizontally, in order to be certain that these 'patterns' are meaningful. However, this is not always the case, hence, in several cases the assignment of types to structures is not clear cut, despite a typology that was devised in order to allow room for variability and diversity²⁰. One factor affecting interpretation is clearly the differential preservation and depth of excavation of buildings. For instance, in cases where excavation did not reach natural, it is difficult to know whether a structure represents a 'founder' or 'continued' house. I have evaluated, however, all the available evidence, mentioning each time the

²⁰ For the sake of clarity and transparency the buildings in which the replication pattern is not strongly supported by direct evidence, but are tentatively assigned to categories on the grounds of indirect evidence and observations, are differentiated by a small letter in the appropriate tables.

limitations of the sample (included in tables in Appendix B), without selecting the ‘best’ information for two reasons: firstly, in order to make use of a sample that, despite the limitations, is as extensive and inclusive as possible and secondly, in order to highlight the need for complete vertical excavation within individual architectural units. Another debilitating factor is the issue of contemporaneity (Smith 1992) which reminds us that the archaeological record represents palimpsests, the details of which are not always clear (Yaeger and Canuto 2000, Bradley 2005, Pollard 1999).

Nevertheless, the project is considered worthwhile since it confronts directly issues of vertical continuity and discontinuity and puts the emphasis on methodology rather than making assumptions, *a posteriori*, about the lack of historical awareness or place attachment within communities that inhabited short-lived horizontal settlements. Of course, we still need to demonstrate that the patterns of replication observed and the strategies of house construction and replacement are suggestive of purposeful behaviour in the past. In other words, to what extent were the successive generations of people who were involved in house construction aware of the location and meaning attached to previous structures? How can we be certain that what we observe in the superimposed or displaced record is what individual actors and whole communities chose on their own accord to remember or forget; and why does it not simply mean that these practices were the result of tradition or conservatism, in the case of repeated practices, or simply coincidental, practical or topographical, in the case of discontinuity. In both cases, how can we ascertain whether the patterns of house ancestry or the lack of, *are*, or *are not* the result of unreflective behaviour (Joyce and Lopiparo 2005, Bradley 2002)? There are not straightforward answers to these questions but they do illustrate the need to move towards a yet finer scale of analysis in order to be better equipped to address them. This is described below.

5.4 Repeated Practices and Stratigraphic Sequences

Each house is recorded and analysed, in terms of its stratigraphic sequence²¹, from the moment of its construction to its collapse and the use of that space post-dating its

²¹ All the case studies that are examined here have been published as final reports (see above 5.2). Hence, the drawn sections of the buildings under consideration are not reproduced here. For cross referencing purposes, however, the appropriate sections are fully referenced in the accompanied (Volume II) appendices (tables 19, 22, 26, 29). Moreover, the relationships that are of importance to this analysis (sequence of episodes) are presented in a simplified diagrammatic form (figures 2, 6, 12, 18).

abandonment. The history of each house, then, can be conceptualised in terms of a sequence of a series of episodes. An *episode* is the basic analytical unit in a sequence (following Frankel and Webb²² 2006: 29-33). It groups together smaller units and describes shorter-scale events the sequence of which is at too fine a scale to be pinpointed chronologically or stratigraphically. In particular, the following episodes are normally expected to be identified in a sequence based on the stratigraphic information available for each architectural unit. In describing below the terminology used in the present work I concentrate on aspects of these episodes from both an anthropological and archaeological perspective rather than their generic (stratigraphic) definitions.

- **Construction**

Episodes of construction include the preparation of the surface for building, foundation trenches, wall, or roof construction, and other structural features of the building. The construction of a new house is a major event that in many traditional societies is accompanied by formal rituals. One of the most important issues in house construction is the selection of location and timing. The knowledge of ritual specialists or a senior member of the group is often required to perform the blessing of the soil by the ancestors (Kus and Raharijaona 1990: 28-9). Foundation offerings, festivals, and attachment of symbolic significance to certain building materials such as timber posts or thresholds (Waterson 1990: ch. 4) are often attested in ethnographic examples and in many cases they can be inferred in archaeological contexts (Ellis 1968, Walker and Lucero 2000, Herva 2005). Furthermore, the construction of a new house is often in pace with the developmental cycle of the domestic group, for instance marriage, death etc. (Rodman 1985a, Lane 1994). What is closely observed here in episodes of construction is the exact location of the house in relation to earlier activities. Was it placed over earlier buildings or other traces of activities? How does the way it was built – form, materials, access, location – reflect, apart from technological knowledge and resource availability, the meaning that were attached to its selected location and form (Rapoport 1989)?

²² Frankel and Webb (1996, 2006a) have recorded the settlement of Marki-*Alonia* in terms of the sequential episodes of individual units and compounds. This has allowed them to present the history of the site (9 phases) in a finer-grained level than usual (2-3 generations per phase) and to concentrate on the complicated sequences of the houses they excavated in a way that later permitted the reconstruction of the stages and social groups utilising the bounded spaces of the village. Their terminology concerning their basic analytical unit, the *episode*, is applied here as a convenient concept to analyse consistently buildings from different sites and phases. The details of episodes are modified here according to the nature of occupation within individual sites but the concept remains largely the same. Two episodes are added to their original list: replacement and post/abandonment. Their episodes of burial and disturbance are not used. The former is subsumed in other episodes and the latter in post-abandonment.

- *Accumulation*

The episode of accumulation refers to the phases of a building's occupation and describes the main periods of its use. From an anthropologist's perspective, this episode would give vital clues as to the daily life, stories, routines, rituals and functions of houses. It would also be of interest in connection with kin structure and house use, gender roles etc. From an archaeological point of view, the episode of accumulation which lumps together several contexts and short-scale events comprises a series of archaeological deposits that represent the stage(s) of abandonment rather than actual use of the building under investigation (Cameron and Tomka 1993, LaMotta and Schiffer 2001, Webb 1995, 2006). For these reasons, the brief observations that are made with regard to episodes of accumulation in the buildings that are studied here, concern rather the material elements that can tell us something about how, and by whom, the buildings were used, aside from the highly sensitive deposition of portable objects. Hence, some observations are made in relation to floor size and household composition, the fixtures and possible function of buildings, their entrances and the degrees of interaction between the occupants and the community. The portable objects found on or above the floors of buildings represent episodes of accumulation and inferences about their abandonment is taken up in the next stage of analysis that deals with the contextual associations within individual episodes.

- *Renovation*

Episodes of renovation normally include, for example, successive re-plasterings of floor or wall surfaces, relocation of doorways, major rebuilding such as roof construction etc. In short, an episode of renovation records all the changes within the life of a building that could potentially have had an effect on the routines of daily life, movement and perception of space and time by the house's occupants. Minor building events that are mainly associated with the maintenance of the house space or furnishings are not included here. These are lumped together in accumulation episodes.

The episode of renovation is an important factor in our interpretation of house histories, since it is in these episodes of remodelling and altering space that we can access the continuity and/or discontinuity between earlier and later stages within the life history of a house. The number of renovations in the form, for instance, of floor replasterings (or occupation horizons in archaeological terminology) would give us a better idea of the longevity of the house and the attention paid to its maintenance. Moreover, ethnographic examples suggest that various renovations such as floor or wall plasterings do not always

take place as a response to practical factors such as decay, but they are often associated with certain life-cycle events and rituals within the household (Boivin 2000, Bloch 1995). Archaeologists do not often pay attention to the significance of these acts beyond the utilitarian, although they have been shown to constitute rich sources of information about the temporal rhythms and changes within generational time (but see Matthews 1996, 2005b, D. Bailey 1990). Apart from the potential of studying closely the events within renovation episodes to gain a better understanding of how the lives of physical houses and people crossed paths over time, we can also conceptualise successive stages of renovation as examples of repeated practices within the bounded space of a building. Consequently, we can make some observations about the differences and the similarities in the use of space between earlier and later phases which affords an interpretation at an even finer scale than studying building horizons and house replacement (see Banning and Byrd 1987). The life span of a building depends on the materials used in its construction, circumstances of its use, decay as well as the developmental cycle of the group, but its duration can be anything between 30 years and more than a century (Goody 1958b, Rapoport 1989). The timing of renovations, on the other hand, suggests that these are more frequent events, ranging from the annual to the life cycle (Boivin 2000), again depending on the circumstances that prompted them.

- *Collapse*

The episode of collapse covers a wide range of the events that end a building's occupation. In theory, based on the consistency of the deposits that define this horizon, as well as the nature of the artefactual assemblage we can distinguish the causes and circumstances of the destruction of a building, such as structural collapse as the result of natural decay; poor building techniques; natural causes, such as earthquakes; deliberate or accidental destruction by conflagration; intentional demolition; planned abandonment; gradual collapse etc. (Schiffer 1996, Stevanović 1997, Brooks 1993, Deal 1985). In reality, however, such interpretations can be proved to be more complicated and tenuous, since a lot depends upon recognising, in excavation and recording, the natural processes and social actions that can deplete or enrich deposition, such as caching; or curate behaviour; scavenging; ritual abandonment amongst others (LaMotta's and Schiffer's 'depletion' and 'accretion processes', 1999, also Lightfoot 1993, Walker 1995, 1999). Archaeologists are increasingly aware of the importance of recognising such processes and incorporating such questions in their excavation techniques and research design. An example that has recently captured

archaeological attention has been the ritual destruction of buildings upon the death of an occupant, which are widely documented in the ethnographic record and its archaeological imprint is beginning to be recognised in prehistory (e.g. Chapman 1999, Campbell 2000, Hodder 1986, Peltenburg 2003, Walker and Lucero 2000, Verhoeven 2000). Although revisiting a site's excavation record with the view to applying a more rigorous methodology and interpretation is always of value, it remains the case that many critical clues are lost in excavation and cannot be repeated, unless the sampling strategies of a project explicitly addresses formation processes (e.g. Tringham, 1991, 2000, Peltenburg *et al* 1998, 2003, Webb 1995, 1998, 2006, Frankel and Webb 1996, 2006a, Verhoeven 1999, Gerritsen 1999), or experimental reconstructions are undertaken complementing the results of the excavation (e.g. Stevanović 1997, G. Thomas 1995).

- *House Replacement*

From an anthropological point of view, the end of a building's occupation is not separate from the developmental cycle of its occupants. Goody has characteristically argued that in societies where houses are built of mud or thatch a closer fit between the life cycles of people and those of buildings is observed (Goody 1958b: 80). What are the circumstances, however, that drive the decision of when, where and how to replace a house? Again, the ethnographic record provides myriad examples of the social norms, beliefs and events that affect people's decision-making with regard to house replacement. An important lesson for archaeology is that these are immensely diverse, not only cross-culturally, but within the same culture or group and, at times, within the space of the same community. This variability is observed in the prehistoric record of Cyprus, as will become apparent from the replication patterns, examined in chapters 6-7.

The episode of house replacement is pertinent upon questions of material ways of historical reference that were posed earlier. The concept and structure of the lineage or clan, for instance, is reproduced in the way buildings are re-erected on the same spot. The right to reproduce the place of the patrimony, to safeguard the house's ancestral heirlooms, to bury their dead in or in the vicinity of the house are similar strategies that ensures the perpetuity of the group and gives the invisible line of ancestors and set of rules a visible, material reality (Rivière 1995, Carsten and Hugh-Jones 1995a, b) Renewal rituals that protect the house's resident spirit as well as the transmission of the names of the lineage (T. Gibson 1995, Waterson 1990) often accompany house replacement. Whilst some of the material aspects of these conceptualisations of lineage and remembrance of the physical and social

house can be traced in the archaeological record, there is an equally great number of ethnographic studies that entertain alternative scenarios of house replacement strategies. Hence, we learn about houses that are associated with misfortune or sickness; are never re-occupied and their traces obliterated; or about locals demolishing a house and re-building it, a process that may take place several times, and yet the house will still be regarded as the oldest in the village; about dwellings that are only occupied for 5 years or less before they are re-built somewhere else, recycling the same building materials (Lane 2005, Rodman 1985a, b, Levi-Strauss 1983)

- *Post-Abandonment*

In archaeological analyses and site reports, episodes of post-abandonment are normally evaluated in terms of 'disturbance' that affects the preservation of lower deposits belonging to the main (accumulation) phases of occupation. Little attention is paid to their connection to the abandoned house as an integral part of its history whilst artefactual and environmental assemblages are often dismissed since they are of low contextual value, for dating purposes, or for assessing the function of spaces. The failure to incorporate post-abandonment episodes into the story of a building or a settlement, unless there is evidence for its replacement in the same location, stems from an adherence to the concept of the use-life of buildings, and of all material things in general. According to Western economic principles of rationalism and consumers' behaviour, what does not fulfil an original function must be discarded. However, episodes of house abandonment hold very important clues as to how houses are treated not only after they are abandoned, but also when they were occupied. There is ample ethnographic evidence to suggest that dwellings are still regarded as active agents even when no one resides in them. The most characteristic case is in societies where the house is conceptualised as a living body with its various structural elements named after part of the body and its inhabitants representing its soul. In this case, when the house loses its 'vital force' it is subject to the same ceremonies, beliefs and commemoration as the human dead, whether this translates into its transformation into an ancestral place or undergoing stages of the afterlife, or obliteration of all traces (Waterson 1990, Gell 1998).

From an archaeological perspective, there is some overlap between episodes of collapse and episodes of post-abandonment. It is not always possible to differentiate between the two, on account of the intermingling of deposits within abandoned buildings' shells. This differentiation depends on how 'clear' the stratigraphy within the area of a

building is – and how it has been recorded in section drawings and described in the site report. On the other hand, it also depends upon the nature and order of events themselves, following the abandonment of a house. For example, it might be the case that a building is left open, after its abandonment or destruction, for a considerable time, resulting in its gradual decay of materials and accumulation of rubbish. Alternatively, the ground of the previous house might be levelled, immediately after its collapse, and used as a platform to receive a new house or to be used for other purposes, e.g. open space, paved area, burial ground. In many cases, the shell of an abandoned building might be re-used as a temporary shelter or as the locus of other activities such as cooking, food processing or as an animal pen. Erosion, scavenging, ploughing and other formation processes will certainly have affected its state of preservation. Nevertheless, all of the above processes and many more scenarios, will tell us something about how the house was ‘remembered’ after its abandonment and consequently they will reveal something about attitudes towards *place-making* in the past. This is the purpose of studying house cycles through their vertical sequences and their traces on the ground, however tenuous or ambiguous these might be.

5.5 Topoanalysis and Contextual Associations

The final stage of analysis examines closer the above house sequences through their depositional patterns and contents. Objects are an integral part of the biography of houses and people and in many cases they are regarded as active agents themselves, as it was discussed in chapter 4. An obvious practice that illustrates the close relationship between material things and memory is the case of the transmission of heirlooms. Anthropological and archaeological examples show how, in many societies, objects are curated and inherited along lines of kinship and lineage rules (Rowlands 1993), while in other societies objects are physically destroyed but preserved as images in people’s memories (Kühler 1988, Kühler and Melion 1991). The consequences of these practices for the preservation and transmission of memory on one hand, and for the formation and survival in the archaeological record are quite different. Heirlooms will be passed down from generation to generation and their attached meanings and histories will be circulated and remembered, potentially for many generations. Archaeologically, they will rarely survive and in any case it would be difficult to reconstruct their long histories, unless they are objects of obvious antiquity found in later contexts. Objects that participate in the second, paradoxical, practice

of remembering by forgetting, will survive less well in the 'living' system, depending upon the workings and cognitive demands on individual memory. The chances of their archaeological preservation, however, will be considerable higher, as implied by the concept of 'structured deposition' (Hill 1995, Richards and Thomas 1984, Bradley 1990, 2005, Chapman 2000a). It is important, therefore, to try to differentiate between the two practices when possible, since their life trajectories and socio-cultural significance will have been different in the two systems of keeping the past alive (Rowlands 1993, Lane 2005).

The next element of analysis, in this thesis, involves the examinations of the contextual associations and the depositional patterns within each episode/stage, in order to learn more about how various objects were part of the biographies of the houses we are studying. In particular, the contextual analysis concerns the identification of the following two aspects: **a.** the depositional history within a given building's sequence of episodes, and **b.** the representation of classes, as well as the preservation of objects. The scales of resolution that the contents of buildings are plotted by, are: firstly by episode, from all houses and phases, as a very coarse indication of depositional 'preferences' within a site; secondly, by episode within individual buildings, and thirdly, by object class and fragmentation patterns, within the sequence (by episode and by floor horizon) of each building. A limited attempt to assess the differences in the distribution of objects between interiors, extra-mural areas and closed contexts (pits, burials) is also made, when this is feasible from the published contextual information²³.

Complex formation processes can alter, deplete or enrich the archaeological record, but as discussed in chapter 1, what survives on the ground is almost never a direct imprint of the past. Archaeologists are increasingly aware of the effects of formation processes on their interpretations of the cultural and social system under investigation and the value of contextual methods of analysis is now widely recognised. Examination of the contextual integrity of deposits for either dating, typological seriation or functional analysis purposes is a standard practice in archaeology. Hence, floor deposits are considered the most stratigraphically 'secure', whilst higher fills, disturbed by later activity entities or residual material are considered of low contextual value. In the following contextual analysis, the aim is not functional, chronological or typological analysis. Consequently, the contextual

²³ Although the procedures followed in this level of analysis are kept the same for all the sites studied, the results, accompanying graphs and presentation of the data, differ from site to site, depending on the quality of the publication, the quantity of contextual distributions and the relevance of the results for the overall aims of this thesis.

analysis is inclusive of all contexts and artefacts without regard for their contextual 'integrity' or concern to establish the most 'secure' contexts for analysis although the study is greatly facilitated when these have been taken into account by the excavator (*cf* Verhoeven 1999, Papaconstantinou 2005, Ciolek-Torrello 1984, Peltenburg *et al* 1998: 4-8, Deal 1985).

In this analysis, the contents of individual buildings are charted according to their position in the sequence of episodes as was defined above. Consequently, several contexts are lumped together in each stage, for example floor and fill immediately above the floor surface in accumulation episodes (following LaMotta's and Schiffer's argument, 1999: 25) that discredits the analytical dichotomy between these two units), or features and objects from multiple contexts in construction episodes etc. Each stage, in the form of episodes for analytical purposes, is considered here as contributing to the deep histories of the house by intentionally or unreflectively referencing another historical or spatial story (Joyce and Hendon 2000, Barrett 1994, 1999, Brück and Goodman 1999b). Taking up the challenge of transforming the stratigraphic, contextual and architectural data into sequences of repeated practices, that is, 'from a description of products of unexamined action to sequences of actions that can be recognised as traditional or innovative, intentional or unreflective' (Joyce and Lopiparo 2005: 369) is the ultimate aim of the following analysis.

Chapter Six

Case-Studies I

Housing Memory and Ancestry in the Neolithic

6.1 Introduction: Outline of Data Presentation

In this and the following chapter the archaeological evidence and the results of the analysis from selected Cypriot sites are presented. As discussed in the previous chapter, the analysis focuses on the architectural record with the view to examining the life courses of prehistoric houses. The results are presented in two chapters, the first (Chapter 6) dealing with the Neolithic period and the second (Chapter 7) with the Chalcolithic and Early-Middle Bronze Age²⁴. The first part of both chapters concerns the detailed (contextual) level of analysis from the four case-studies. The same format is followed in the discussion of all four of them: after a brief introduction of the history of research and a general description of the archaeology of the site under investigation, the replication patterns observed site-wide and by phase are discussed. A general account of the major episodes that have been identified within the sequence of individual buildings is given, using selected examples to illustrate how these sequences can shed light on what can be considered as repeated practices within the life cycles of buildings and people. A more detailed description of the architecture and events, within the identified sequence, per building, is provided in Appendix D. Finally, a series of observations regarding the results from the contextual analysis is offered. The latter, places portable objects, architectural features, burials and pits within their respective

²⁴ This separation is arbitrary, following the wide application of the conventions of the Three Age System on the Cypriot material (table 15, *cf* Knapp *et al* 1994 for a critique and alternative chronological schemes). The purpose of the research at this stage is not to provide an exhaustive review of the archaeology of these periods, but rather to concentrate on the micro-scale. A diachronic assessment evaluating the ‘facts’ of the continuities and discontinuities of the settlement record, their distribution in the landscape as well as their horizontal boundaries and whether these were perceived in this way in the past is only touched upon in chapter 9. Future research that deals with settlement patterns and evaluates the excavated sites as well as those located in survey addressing these issues in a more holistic manner would be fruitful (e.g. Peltenburg 2003: for the Neolithic/Chalcolithic transition).

stages in a building's sequence, regarding them thus as inseparable aspects of how architectural spaces were transformed into place and memory. In the last part of chapters 6 and 7 the results are summarised and evaluated, reflecting at the same time on the possibilities that this line of research opens up for translating the products of excavation into sequences of commemorative, traditional, intentional or unreflective actions.

6.2 Kalavastos-*Tenta*: History of Research and Settlement Layout

The Aceramic Neolithic site of Kalavastos-*Tenta* is located on a hill overlooking the Vasilikos river valley, in the southern region of the island, 2km from the modern village of Kalavastos and 3.2 km from the south coast (fig. 56). It was excavated by I. Todd (Vasilikos Valley Project), between 1976 and 1984 (Todd 1987, 2005). Prior to this, Dikaios had undertaken limited excavations, in 1947, uncovering the upper parts of the southern stretch of the settlement's wall as well as three other structures within the walled area (Todd 1987: 14-5). The subsequent, more extensive, investigations by the Vasilikos Valley Project extended the exposure covering a total area of approximately 1,500m². The excavations concentrated on two areas, which are referred to, in the publication, as 'top of site' and 'lower south slope' (Todd 1987). In both areas, architectural remains of curvilinear dwellings and a number of extra-mural features were located (fig. 59). The buildings are tightly packed, especially in the 'top of site' area, following population expansion during the later phases of the settlement. The stone wall that presumably surrounded the site²⁵ was reinforced by additional courses of masonry, at least twice, during the life of the settlement and a ditch was located immediately to its south. Soon after the construction of the encircling wall, buildings were erected outside the bounded area (e.g. S94)²⁶ and although the wall was still in use, or at least still visible, buildings continued to be located outside the settlement's built boundaries (period 2), which precludes a defensive function for the wall.

A number of domestic and smaller ancillary buildings were excavated, mainly within the walled area and several wall arcs belonging to curvilinear buildings were partially investigated outside the wall. The western side of the upper slope is dominated by a large architectural complex that comprises a small roofed building enclosed by two

²⁵ Only the southern stretch of the wall has been excavated. Its continuation to the north east has also been located in a small exposure (Todd 1987).

²⁶ Buildings, whether domestic or serving some other function, are referred to, in the final published report, as structures (S) followed by a consecutive number. Pillars, incompletely excavated wall arcs and the settlement boundary walls are also included in the same list of structures. Here, only the domestic architecture is included.

concentric outer walls with buttresses and clearly defined gateways. The space between the central building and the outer walls was probably open. The overall bounded area of the building complex is 71.48m², which appears disproportionate compared to the roofed area of the other buildings on the site ranging from 3m² to 18m² (table 20). The architectural complex, that belongs to period 2, has been interpreted as a building of 'special significance' (Todd 1987) or a communal granary (Peltenburg 2004).

The architecture is generally well preserved, although erosion and terracing account for some disturbance, and shallow deposits and disturbed upper levels of the archaeology were noted. Hence, the preservation of walls varies from a preserved height of 1m to, more rarely, just 0.1m of the stone footing (table 20). The site is now open to the public and considerable consolidation work has been undertaken, along with measures, in the form of a shelter, to protect the exposed mud-brick walls (Todd 1998). Nevertheless, despite the impressive preservation and large horizontal exposure, there are a great many unresolved questions associated, mainly, with the lack of completely excavated buildings. Given the limitations of time and funding on large excavation projects, this is understandable, to an extent. It is somewhat unfortunate, however, since a deeper understanding of the history and continuity of the site depends upon documenting as many early levels as possible, and establishing the longevity and occupational sequences of individual houses. At *Tenta*, this was partly hindered by the limitations of space for excavation within and between houses, without demolishing the latest better preserved walls. Therefore, more excavation projects are needed to incorporate the 'house' in their research aims and strategies, and in the field. Moreover, it is important to have a better balance between establishing, for example, the extent and boundaries of sites, (perhaps with the aid of geophysical methods and a focus on complete vertical excavation within individual houses), if we are to understand how continuity and discontinuity with the past was operating in prehistory and the qualitative differences between flat sites and the better understood *tell* sites elsewhere in eastern Mediterranean.

Nevertheless, *Tenta* is an extremely important site. Apart from the well known architectural complex and figurative wall painting, which reveal glimpses of social organisation and ritual, the site's importance, currently, lies in its attributed early dates, or rather in the recently revised dating of the site in the Middle Aceramic period that radically changes our understanding of the earliest permanent settlement on the island. In particular, the sudden appearance of the fully fledged Late Aceramic Neolithic occupation on sites

such as Khirokitia-Vounoi and Rizokarpaso-Cape Andreas Kastros now appear to be a local development from Middle Aceramic sites such as *Tenta* and Parekklisha-Shillourokampos (tables 14, 15). The acceptance of the 9th-8th millennia BC cal dates by the excavator and the detailed lithic analysis (Todd 2005, McCartney and Todd in Todd 2005, McCartney 2006) has led to the re-working of the chronological sequence at *Tenta*, once thought to belong to the Late Aceramic (Khirokitian) phase. Briefly, the series of 22 radiocarbon determinations from *Tenta*, of which Todd considered 16 to be secure (table 16), contained a high proportion of 9th-7th millennium BC (cal.)²⁷ dates which were inconsistent with the 6th millennium BC (cal.) dating of the site, on the basis of the architectural characteristics. Initially, Todd drew attention to the possibility that the 9th-8th millennium BC (cal) dates from the 'top of the site' might belong to an early occupation (Period 5) that predated the stone architecture but he rejected the 8th-7th millennium BC (cal.) dates for the structures in the 'lower south slope' (Todd 1982a, b, 1985, 1987: 174-8). Following the discovery of Parekklisha-Shillourokampos (Guilaine *et al* 1998, 2000) and the completion and dating of excavations at Kissonerga-Mylothkia (Peltenburg *et al* 2003) it became apparent that these 'anomalous' dates from *Tenta* should be re-examined and that the Period 5 dates clearly predate the late Aceramic phase of the Khirokitian culture (Todd 2001, Peltenburg *et al* 2001b, Peltenburg *et al* 2003: 83-7). Further detailed lithic analysis in tandem with the re-assessment of the stratigraphy and the contextual integrity of deposits led to placing the main architectural phases (periods 4-2) in both the 'top of site' and 'lower slope' areas within the Middle Aceramic Neolithic (McCartney and Todd in Todd 2005: 230-1, tables 21-22). Hence, what was once viewed as an 'impossibly lengthy duration' of the settlement (Todd 1987: 176) is now widely recognised as representing the continuous presence of occupants on the *Tenta* hill for nearly three millennia, not taking into account the post-Aceramic (re)occupation (Todd 2004).

²⁷ All dates have been recalibrated (table 16) with Ox Cal 3.1, for the sake of consistency.

Kalavassos- Tenta

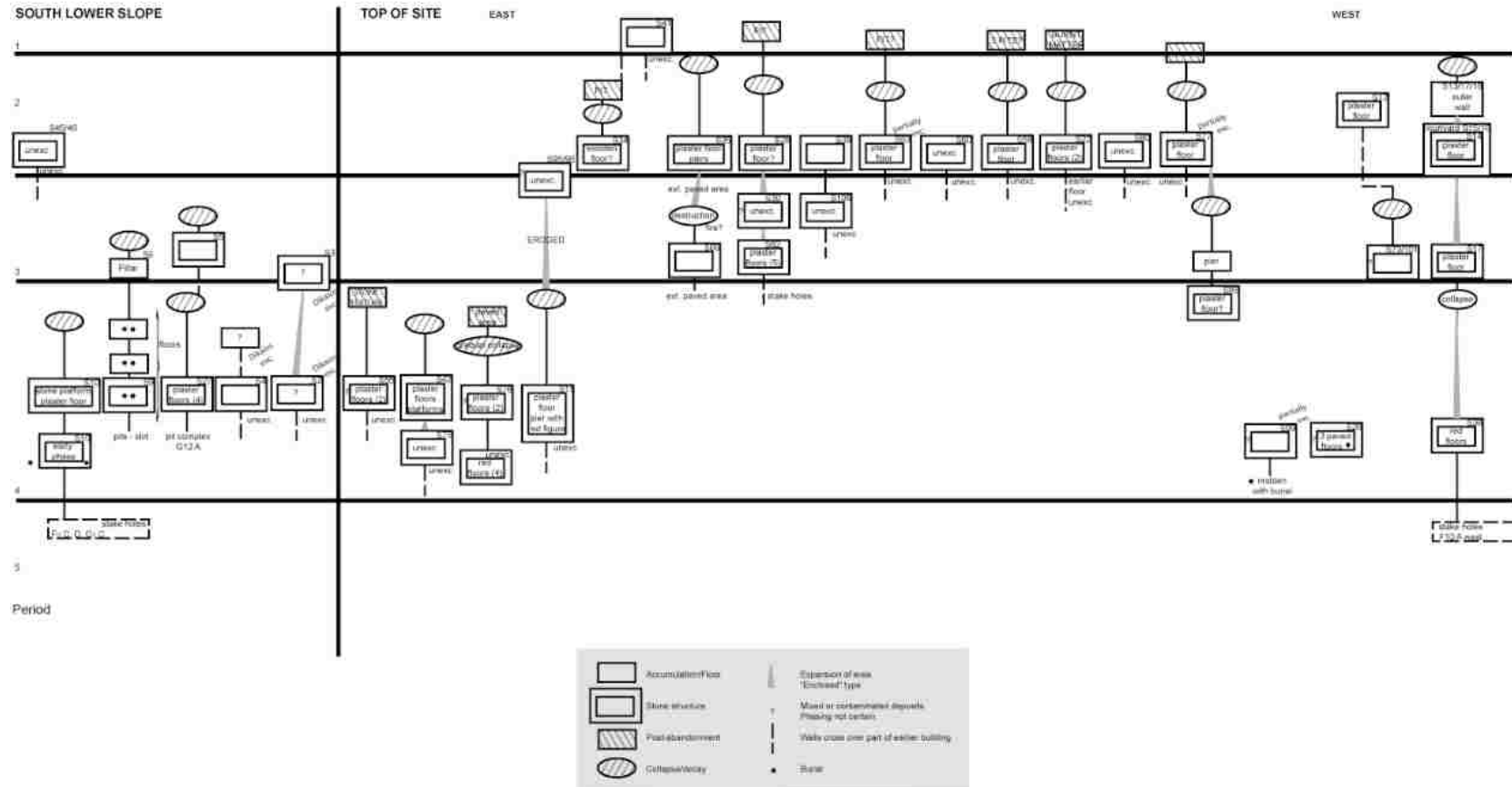


Figure 2. Schematic representation of house replacement: Kalavassos-Tenta.

6.2.1 Replication types and house ancestry (tables 3-4, 19, fig. 2)

KT Period	Cultural Period	Single	Double	Triple	Quadruple
5	E Acer	?*			
5/4 early	E Acer/ initial M Acer	2			
4	early M Acer	9	3		
3	middle M Acer	7		1?	
2	late M Acer	5	5	1	1

* The number of Period 5 structures is not clear. Postholes, probably belonging to timber structures were found below and immediately to the W of Structure 36 and below and outside Structures 9, 10, and 27 in the lower south slope.

Table 3. Longevity of house occupation at Kalavassos-*Tenta*

Note that double or triple etc. generation does not denote the longevity of individual houses but the locational continuity of successive re-buildings, which in the case of *Tenta* do not always follow the wall lines of their predecessors.

The span of approximately 100 generations²⁸ on the locality makes *Tenta* an interesting case of how place memory would have operated and transmitted within such a long time span. Unfortunately, information from the Late Aceramic period (period 1) is lacking since most architectural remains have been eroded away. Hence, this analysis takes into account only the better documented Middle Aceramic period (periods 4-2), although some general inferences can be made concerning the occupation during the Early/Middle Aceramic (period 5). At this point, it is important to reiterate what was discussed in Chapter 5 concerning the problems of discerning occupation horizons on sites like *Tenta* where the prevalent pattern of architectural sequence is one of horizontal displacement, rather than vertical superimposition. Todd notes the difficulties especially concerning the correlation between the two areas ('top of site' and 'lower south slope'), which in essence, remain stratigraphically unconnected (Todd 1987: 177). As a result, it is difficult to obtain horizontal plans for the layout of the settlement during any sub-period, in order to assess the replication patterns and overall development of the community, over time. It has to be stressed, therefore, that these sub-phases (periods 5-2, period 5 representing the earliest

²⁸ The duration of a generation is taken to be 25-30 years. Note that at times I also refer to generations of houses. These, following D. Bailey, are defined by the 'horizon' that they belong to. Hence, at *Tenta* each phase or each group of contemporary buildings is taken to denote a generation. For the problematic applications of this concept in 'open' sites see discussion in chapter 5.

level) might not always represent site-wide or true building horizons but they describe, nevertheless, continuous building and rebuilding activities where structures were built, remodelled on several occasions, rebuilt and/or abandoned. In addition, of the total of 53 buildings that were excavated, only 20-25 buildings were unearthed in a large enough horizontal exposure to allow any inferences about their nature of construction and occupation (table 20). Also, as already noted, the reconstruction of their longevity and continuity is hindered in some cases by limited vertical excavation where the earliest floor levels were not reached (table 20). Despite the uncertainties regarding broad stratigraphic relationships and earliest occupation horizons, the publication provides a detailed stratigraphy, for individual buildings and squares, and in order to make the best of the available information some observations can be made concerning the replication patterns and house ancestry on the site over a period of roughly 1300 years (periods 5-2). For the present analysis 5 phases are taken into account on the basis of the published stratigraphy. The revised sequence that was published in 2005 (McCartney and Todd in Todd 2005: table 22) has elucidated certain aspects by providing an account of what the excavators considered as stratigraphically secure contexts.²⁹

Period	Repeated	Continued	Enclosed	Displaced
4	1	5	1	9
3	1	3	3	5
2	2	2	6	7

Table 4. Types of replication by period, Kalavassos-Tenta

At first glance, it appears that a considerable horizontal displacement of buildings takes place over time. The majority of buildings belong to the ‘displaced’ type (table 4). Seemingly, in period 4, occupation is concentrated on the lower slopes of the hill, while in period 3, and, subsequently, in period 2, the ‘top of site’ area is densely built. It might be important that the period 4 structures were never re-occupied in subsequent periods, if it could be shown that this is not due to preservation bias, whereas in period 2 an increasing number of buildings show some locational continuity by incorporating the walls of previous buildings in their plan. In particular, by the end of period 4 only three structures

²⁹ The less secure deposits are also included in the present analysis. These are generally buildings that the excavator could not place in one period or another with absolute certainty and these are followed by a question mark in table 19.

(S36, S76, and S42) could be taken to represent a double generation³⁰, the former having survived in the same location since period 5 timber structures and the latter two, since period 4-early. By period 2, six structures were built in the location of earlier (period 3) structures and a number of buildings were located outside the perimeter of the settlement wall. The only buildings that survive as triple and quadruple house generation are Structures 17 and 14 respectively (see above, table 3).

As far as the longevity of each generation of houses is concerned, we can only tentatively say, on the basis of the radiocarbon dates, that period 4 which subsumes period 4-early, lasted approximately under 200 years³¹. Within this time frame of approximately 5 to 6 biological generations, there is evidence for continuity as demonstrated in the case of the group of structures 76, 42, 75 and 55 (table 19, fig. 2). With only one date for period 3, it is not possible to ascertain its duration. Taken together with period 2, these building and re-building phases on the site took place over the span of roughly 400 years (10 to 11 generations). Continuity is more clearly demonstrated between periods 3 and 2 with some buildings expanding their area and clearly marking this enlargement by incorporating the walls of previous structures as in the case of Structures 39, 35, 77, 95/96 and 17 (fig 59). In the same period, population growth and expansion is demonstrated by locating buildings outside the wall and, based on the limited information we have from partial excavation of these buildings, we note that the same pattern of series of enclosures and enlargement of occupied area (Structures 57, 52, 50) occurs (table 19).

In summary, the characteristic replication pattern at Tenta is the '**displaced**' type in the earlier phases and the '**enclosed**' type in later phases, although marginally. In the latter pattern, walls of structures created series of nested houses of different phases by following the alignment of their predecessors but not on the precise location. An interesting trend that is noted in the 'enclosed' type dwellings is that the floor of the later building was visibly raised at the point where the new floors crossed over the underlying wall of the earlier building. Structure 39 might be the only building that was built directly above S106 ('repeated') although the latter was only partially excavated. In addition to these types of house ancestry, we also note that in some cases later walls cross over and overlay part of the area of earlier buildings (S12, S5, and S65/64). Hence, there is a considerable variability in

³⁰ Note that generation refers to generation of houses in a horizon, as defined by Bailey (1990) and discussed in chapter 4, not biological generations.

³¹ Based on the last C14 date for Period 5 (KT15) and the earliest date for Period 4 (KT8). See table 16 for details. See also table 87 in Todd 2005: 263 (*cf* Peltenburg 2003: 87, table 11.3).

the ways that successive (biological) generations choose to, perhaps symbolically, claim a house ancestry, but it is also apparent that there is a greater degree of continuity and intentional design in terms of location, despite the horizontal displacement observable at first glance. Contrary to the variability that is observed within individual buildings, or groups of buildings, associated perhaps with separate kin domestic groups, the development of the architectural complex 14 that crowns the west part of the hill remained a constant throughout the life of the settlement (periods 5-2, see table 19) . Its replication pattern mimics the 'enclosed' type that was observed in certain structures and its bounded area, by its final phase of S14 with the two concentric walls, had nearly tripled³², which suggests special attention to commemorating precedence and origins, in this particular location, in a more organised manner than in the rest of the settlement.

6.2.2 Overview of episodes (Appendix D)

The following overview describing the major episodes in the life history of buildings based on their stratigraphic analysis, considers mainly the periods with well documented upstanding architecture (periods 4-2). The examples that are offered in this section illustrate in more detail the overall replication patterns discussed above. The succession of the episodes of construction, accumulation, renovation, replacement and collapse/post-abandonment is noted in the majority of buildings in which excavation was more complete. However, the sequence, number of renovations and rebuildings are obviously not the same in every building and examples of their characteristics are presented below (see also table 21).

Construction

The erection of stone architecture on the site at the beginning of period 4 succeeded timber or some other form of lightly built structures (period 5). Evidence for these early buildings on the site comes from two main areas below the architectural remains of period 4. The first set of post holes was located below and to the west of Structure 36 on top of the site and the second set from the area below and between Structures 9, 10 and 27 in the southern lower slopes (Todd 2001). Very little survives from these early, possibly curvilinear, timber structures or, in the case of the 'top of the site' area, linear palisade enclosing that part of the

³² From the 24.63m² of roofed space in Structure 36 to an area of 71.48m² that includes the overall space enclosed by the second outer wall S13/19/29 (table 21). Area estimates are based on the internal diameter given in the publication (Todd 1987).

settlement. Hence, we cannot make any further inferences beyond noting the locational continuity³³ between timber and stone architecture and suggesting that if this continuity is not an excavation bias, then it may be important that the area of the early timber palisade (period 5) received the successive buildings of the architectural complex on top of the site (periods 4-2), while the second area with curvilinear timber structures in the lower slopes (period 5) was succeeded by two buildings that contained 50% of the excavated burials on the site and had similarly a greater than normal longevity.

The succeeding phase of stone and mud brick domestic architecture on the site is characterised by a striking variability in masonry styles and building methods (Todd 1987: 33-8). At the same time, the solid stone or mud brick walls of the dwellings, the organised layout of the community with the outer settlement boundary and the large architectural complex on top of the hill point to permanent settlement and contrasts with the lightly built structures of the previous period. The excavator notes the presence of both stone and mud brick walls and sometimes of walls that make use of both materials and concludes that there does not appear to be any chronological or functional distinction in the preference for one or the other (Todd 1987 33-4)). While the variability in construction methods is noticeable, there does seem to be a preference for stone buildings in period 4 whereas by period 2 more buildings are constructed of mud brick (fig. 59, table 20). Without reading too much into a clearly incomplete excavated sample we can simply point out that Structure 36 which belongs to period 4 and its successor in period 2, building complex 14, would have visually stood out since, apart from their size, their construction materials are the reverse of the prevailing pattern that was noted above. Most walls are plastered on the interior but rarely on the exterior. Another characteristic of the buildings at Tenta is the construction of buildings with double walls that we find throughout Periods 4-2. In some cases both walls are of stone (e.g. S95/96, S10) in others the inner is of stone and the outer wall is constructed of mud brick (e.g. S75, S42, S55) or vice versa (e.g. S36). Structure 14, the central structure within the building complex, is entirely built of stone and is encircled by two further concentric stone walls, the second being a later addition to the first. It is worth noting that the complex has an elaborate plan but in terms of design it can be considered to be an

³³ In the first volume of the final report (Todd 1987: 174) Todd accepts the possibility that there might be a gap between periods 5 and the erection of the first stone architecture on the site during period 4. Following more detailed stratigraphic analysis as well as a contextual and typological assessment of the lithic industries, the excavator leans towards accepting that there was probably no gap between periods 5 and 4 (McCartney and Todd in Todd 2005: 212).

enlarged version of domestic architecture that already exists on the site in simpler forms (e.g. S77, S10, and S35). The same idea is repeated with the construction of the two inner walls (S2, S3) projecting inwards from the settlement wall.

Rectilinear piers are found in some buildings, mostly centrally located either as a single freestanding feature or in pairs aligned parallel to each other. In most cases the construction of piers was part of the initial design of the buildings while in others they were inserted as a later addition. Their function is not clear and there is no agreement as to their structural utility. The occurrence of similar but larger pillars at Khirokitia was interpreted as roof supports or structural supports for an upper floor (Dikaios 1953: 20-1). Todd argues that the buildings with one or two pillars at Tenta were used to support an upper wooden floor that would have increased the available floor space considerably, but he admits that no evidence has been found in any of the structures for such a floor (Todd 1987: 41). More recently, Peltenburg has favoured an alternative explanation that considers the possibility that the pillars would not have been of any structural use but rather symbolic in nature, in analogy with PPNA and PPNB mainland traditions (Peltenburg 2004).

Accumulation

Although a detailed spatial and functional analysis is not the aim of the present work, any description of the life history and use of a building must take into account issues that relate to its function and, more to the point, the social groups or individuals, their life histories and inter-personal relationships which would have been associated with particular buildings on the site. Anthropological models of kinship and co-residence (Yanagisako 1979) are not particularly helpful in this case as we are dealing with a number of structures, rather than a single dwelling that would accommodate a single family or household, the function of which or indeed their grouping are not altogether clear (Todd 1987). Comparisons with Khirokitia-Vounoi (thereafter Khirokitia) or Rizokarpaso-Cape Andreas Kastros show certain similarities but also profound differences (LeBrun 1981). However, in the light of the revised dating of the site, parallels with Late Aceramic sites are not sustainable anymore. Instead, the organisation of domestic space and social groups at Khirokitia, where Le Brun (2001, 2002, Le Brun *et al* 1994) has recognised discrete clusters of similar structures arranged around a courtyard that taken together comprise a house, are best understood now as evolved elements that have precedents at Middle Aceramic sites like Tenta. There, Todd is reluctant to recognise such discrete clusters of buildings and social

groups given the lack of finds and fixtures from the interior spaces and the lack of a uniform plan and size of these structures. He does argue, however, that the larger buildings with double piers and presumably an upper floor would have housed nuclear families (Todd 1987: 31). Narrol's figure (Naroll 1962) of one person per 10m² for the larger buildings with double piers, such as Structures 22, 27, 35, 55, 42 that have an average floor area of 12.5m² (table 20) would give a figure of one person per structure or 2-3 if, according to Todd we calculate the area of the upper floor (Todd 1987: 31). Le Brun has similarly used the same figure for Khirokitia to infer one individual per structure. He argues though that at Khirokitia, groups of small buildings are inhabited by individuals belonging to polygamous households (LeBrun 2002, after Flannery 1972).

The limitations of attempting to establish population estimates on the basis of floor space are well known in the archaeological and ethnographic literature (Kolb 1985, P. Watson 1979, Byrd 2000). Narrol's (1962) figure of one person per 10m² has been considered too low and his methods of obtaining these figures have been criticised (Byrd 2000). Kolb (1985) has come up with an average of one individual per 6.12m² while similar research in Middle Eastern houses suggests figures lower than 7-8m² per individual (P. Watson 1979). At *Tenta* there seems to be a grouping that include a larger building with two piers and 2 or three smaller ones, one of which contains a single pier. A dwelling like S27 with an area of 23.76m² could well house 4 individuals (with Kolb's figure). However, these can only be suggestions and do not represent accurate reconstructions, since they do not take into account issues such as cultural attitudes to personal space and crowding that varies across cultures (Kuijt 2000, Hall 1966). Taking the presence of hearths as an indication of domestic space (Byrd 1994, Flannery 1972) would result in an under representation of domestic structures at *Tenta* since hearths were located in only 5 structures, of which all but one are smaller buildings with single or without piers (table 21, fig. 27). In contrast, numerous fire pits and hearths were located in close proximity and in some cases clearly associated with groups of structures. It is clear, therefore, that domestic space at *Tenta* does not conform to the idea of bounded space but includes smaller structures, courtyards and paved areas outside the buildings (fig. 29). Whether these groups represent nuclear families possessing a number of smaller specialised structures or extended families living in close proximity with each other and occupying the bigger houses with double and single pillars according to rules of age or marriage cannot be known with certainty.

Renovation

Episodes of renovation and major re-modelling are attested in most of the houses that have been excavated to some depth. They include frequent re-plasterings of the floor surface and the wall; blocking off entrances and windows and relocating the doorway; adding or demolishing central piers; and erecting additional outer walls (see Appendix D). The frequency and timing of these renovations as well as their associations with specific events or circumstances that would have prompted them, apart from and including the natural process of decay, are difficult to determine. However some observations can be offered, illustrated with examples from the site. The majority of the floors at Tenta are plastered and relatively well preserved. Multiple layers of plaster were excavated in some buildings suggesting that the houses were well maintained. There appears to be a greater number of renovations associated with floor and wall replasterings in buildings of Period 4 that declines towards Period 2³⁴. However, this might be an excavation and preservation bias since more Period 4 buildings were completely excavated (table 20). Overall, buildings had between two and four to five floor levels, sometimes more, as well as several minor renovations associated with re-applying plaster in features such as platforms and piers as well as in the interior of walls. As a general rule the floors were cleared out prior to replasterings and it is characteristic that the deposits between these successive renovations rarely exceed 0.02-0.03 m of usually dark ashy fill.

Comparing now the number and nature of renovations between the larger buildings with two piers, the smaller ones with single piers and the ones without piers or other features, in the groupings suggested above, it is interesting to note that the latter two have been subject to equal or greater number of replasterings and re-modelling than the larger buildings with double piers. This is curious as we would expect to find more attention to maintenance and more frequent renovations in habitation areas compared to 'ancillary' buildings, assuming, as Todd does, that these were used as dwellings with an upper floor and the smaller ones as specialised areas. Examples include the Period 4 group of Structures 27, 9, 10 and 4 in the 'lower slope area'. Four successive plaster floor levels were excavated in double pier structure 27. Sometime after the second layer, a stone paved area was added between the piers. Smaller structures, 9 and 10, in the same group had a sequence, the former of four floor levels, each possibly with several re-plasterings and the

³⁴ Note that since not all buildings have been excavated to the same depth there is no point in presenting numerical values or graphs for these 'patterns'. The same applies to the number of renovations and remodellings below. A bigger sample is needed in order to evaluate whether these patterns are meaningful or random. All the information is included in table 20. See also Appendix D.

latter 3 floor layers with two re-plasterings of the platform features in its west side. It is quite possible that some of the successive plaster layers in both buildings and especially in structure 9 were associated with the sub-floor burials as part of the funerary rites. Burial sequences are not usually attested at Tenta to the same degree as Khirokitia. Structure 9 is the only house with 5 sub-floor burials all belonging to different phases within the life of the building while structure 10 had one burial pit cut into natural that may have predated the structure. Another group of buildings, Structures 11, 76 and 42 in the 'top of site' area also exhibits the same attention to maintenance that is not differentiated by size or numbers of central piers. The floor of double pier structure 42 was re-plastered at several occasions and at some point a second, outer, mud brick wall was added to its original stone wall. The earliest levels of neighbouring smaller structure 11 were not reached in excavation but its freestanding central pier adorned with two red anthropomorphic figures was re-plastered several times. Structure 76 shows remarkable continuity with a series of red plastered floors immediately below its latest two white plaster floors. Rare exceptions to the norm of plaster floors occur in some buildings. Structure 26, although partially preserved and excavated, is worth noting for its three superimposed stone paved floors succeeding an earlier plaster floor. The rough stone surfaces might have been intended to receive a plaster floor but traces of the latter were not found (Todd 1987: 93). The third floor level, paved with large river boulders horizontally- laid, seal the skull and scattered remains of an infant lying on another stone surface. If the stone pavings are intended as preparation for a plaster floor then the skeletal remains could be considered as foundation offerings and would have been subject to secondary treatment, since the skeleton is not complete or articulated.

With regards to continuity in the use of space between successive occupation horizons, it is not easy to judge since there are very few features and finds on and between floors. Some evidence for continuity, though, exists in the persistence of raised platforms through successive re-surfacings (S27, S10). In other cases, the partition of space would have changed considerably with the addition or demolition of central piers. In Structures 9 and 85 a freestanding pier is added in the latest phase of the building, while in Structure 55 a second pier is constructed parallel to another that belonged to the initial construction of the building. In contrast, Structure 35 was initially inhabited as a double pier building while in a later phase one of the piers was possibly demolished. In the same building, the addition of two stone projections from the NW pier at a later date would have altered the interior

segmentation and circulation within the building since the NW part was now closed off from view from the main area.

Certain buildings underwent major modifications with regards to their entrance locations. Structures 55 and 42 are characteristic for their relocation of entrance three times during their history of occupation. Niches in the wall, windows and doorways are blocked and plastered over in later phases of several buildings. This again would have affected the circulation patterns within and between buildings. Characteristic is the case of the relationship and interaction between the occupants of Structure 55 and adjacent Structure 42 of Period 4. The entrance orientation in both structures changed at least three times during their occupation whilst at some point a mud brick wall was added physically and visually separating the two structures.

House Replacement

As noted in the discussion of the replication types at Tenta, there is a considerable horizontal displacement that characterises the pattern of house ancestry over time. It has to be noted, however, that we do not know the full extent of period 5 timber structural remains and not all period 4 and period 3 buildings were completely excavated (see table 20 for extent of excavation in individual buildings). Therefore, at the moment, the 'displaced' type buildings are overrepresented, in the absence of deeper stratigraphy and there might be more continuity between architectural phases than it is at present possible to evaluate. However, a number of houses are clearly superimposed above earlier buildings ('enclosed' and 'repeated' types, see table 19) especially in period 2. To discuss the continuity or alteration observed in episodes of house replacement in buildings of the above two types ('E' and 'R') some examples are presented below irrespective of their period of construction.

A series of red floors that predate the walls of Structure 76 were located immediately below its floor. The walls of this early structure were not located but the superimposition onto its floors indicates locational continuity. The spatial arrangements within the area of Structure 76, however, differ from those within the previous structure. The features of the latter were not repeated in the new structure, which now lacked fixtures completely. In addition, the white plastered floor of Structure 76 contrasts with the series of the four red-painted plaster floors of the earlier one. A similar situation is noted in Structure 10 where the partition of space changes radically between the early phase that might predate the walls of the structure and the later phase of the building. In the former a

possible partition wall (indicated by a linear series of post-holes) closes off the north-east part of the structure whereas in the later a stone platform occupies the western half of the floor area, narrowly missing the earlier sub-floor burial that contained four infants.

'Enclosed' type buildings S66, S42 and S28 replaced earlier structures S35, S75 and S62 respectively, in the same location. The alignment of their walls and their shape follows those of the earlier structures. Part of their circuit wall incorporates or abuts the lower course of the earlier building while the other side of their circumference expands and encloses the area occupied by the earlier building. This pattern is identical in all three examples and is also indicated by partially preserved or excavated structures S39 and S106, S23 and S71/72 and possibly S51/57 and S52. In the three better preserved buildings that were mentioned above we can observe the continued or altered use of space between phases. Two of the expanded structures (S35 and S75) replace simpler with very few fixtures buildings (S66 and 75), with double pier structures that contain elaborate paved and plastered platforms. In both, the use of space changed radically between re-buildings. The internal hearth of period 3 structure 66 is sealed with stones and is not repeated in period 2 structure 35. The third example, S28, replaced period 3 building S62, but there is limited evidence to suggest that there is an intermediate building phase possibly represented by encircling wall S30, which attests to the repeated occupation in that location. The longevity of this arrangement is indicated by the repeated re-plasterings (at least four) in structure 62 before it was replaced by two successive structures. Partial excavation of the double wall of structure 77 reveals that it was built following a similar pattern than those seen above. It encircles earlier structure 87 and its area, although not preserved, would have been considerably larger than its predecessor. In addition to these building practices that are presumably based on direct observation of the positions of previous remains, more random patterns of house replacement are attested where walls cross over part of earlier buildings without a concern for repetition of the shape or alignment (e.g. S5, S12).

The successive re-buildings of Structures 36, 17 and triple concentric walled complex 14 are of interest, not least because of their large size and elaborate plan. As it was noted the complex has a house ancestry that survived the re-building phases of at least four generations of houses on the site. Its replacement pattern is no different to the 'enclosed' type of other houses with a series of nested structures with underlying, overlapping parallel walls, of different phases. In terms of the continuity of their plans all three seem to lack internal features. The earliest structure 36 had 2 successive red floors and a large pit was

located centrally possibly for a wooden post. The post hole continued to occupy the floor of the succeeding structure 17 which also had a series of 4 red floors. The last and more elaborate in terms of its outer walls structure 14 was featureless and no red floors were associated with its interior. The roofed area of this building was a lot smaller than its predecessors. In contrast, the outer wall provided ample courtyard space, which suggests a changed conceptualisation of bounded space within this possibly public building.

*Collapse/Post abandonment*³⁵

There are two main patterns of house abandonment at Tenta. The first concerns the buildings that are succeeded by new structures that were noted above and the second the remainder of the structures as well as the final collapse and abandonment of re-occupied buildings. There does not seem to be any great lapse of time between re-buildings as suggested by the dearth of artefacts in collapse and post/abandonment deposits in buildings that were replaced (e.g. S66, S62). Only one structure (S66) bears evidence of having been burnt. Whether this was a deliberate destruction or an accidental fire is not certain. This building was only partially excavated in two small soundings and this is unfortunate since the accumulation deposits not reached over an extensive area could have provided us with vital clues not only to function of the building, but also to the nature of its destruction. It is characteristic though that this structure is one of very few that preserve *in situ* evidence for collapse mud brick from either the superstructure or the upper walls. The majority of the houses at Tenta underwent a slow process of decay and collapse and there is nothing to suggest that they were suddenly destroyed. Instead, buildings were left open after abandonment and in most cases post-abandonment material such as animal bone, various lithics and other refuse was allowed to accumulate in their ruinous interiors. As there is very little evidence for their collapsed superstructure this may have been weathered away since the building remained open for a length of time or it may have been dismantled and recycled in other buildings like it has been suggested for the mud brick superstructures of Kissonerga-Mosphilia (Thomas 2005). There is also some evidence to suggest that the shells of abandoned buildings were used for other purposes like cooking as in the case of structure 99 where fire pits were cut in its accumulated fills of decayed building material. Various pits were cut from similar deposits in many abandoned buildings which suggests

³⁵ There is not enough stratigraphic differentiation between episodes of collapse and post-abandonment. To an extent this is a preservation bias, but it also shows that buildings might have been left open for some time.

that they were used for a variety of purposes after their abandonment. Paved areas were also found in some abandoned structures (e.g. S76) and further evidence for change in use after buildings were abandoned is also provided by structure 55 which in its late probably roofless phases was used to shelter animals³⁶.

The abandonment and decay of houses would have also changed the relationship between interior and exterior space and the interaction and circulation paths between neighbouring houses. Since absolute contemporaneity is very difficult to prove we can not be certain of the rules that guided how, by whom and when the space of abandoned houses would be utilised. However, we can note that exterior space was used for a variety of purposes associated presumably with specific houses. When buildings are abandoned and left to decay outside spaces are still used for a variety of activities (e.g. extra-mural space with hearths after S10 was abandoned). In other cases changes in the use of exterior space follows the life cycles of the houses which suggests that outside space was considered as an extension of bounded space and this would be especially the case during the Cypriot summer (Kamp 2000). Paved and plastered areas outside houses corroborate this flexible use of exterior space as an extension of domestic space.

6.2.3 Contextual analysis (table 21, figures 3-5, 25-30, Appendix E)

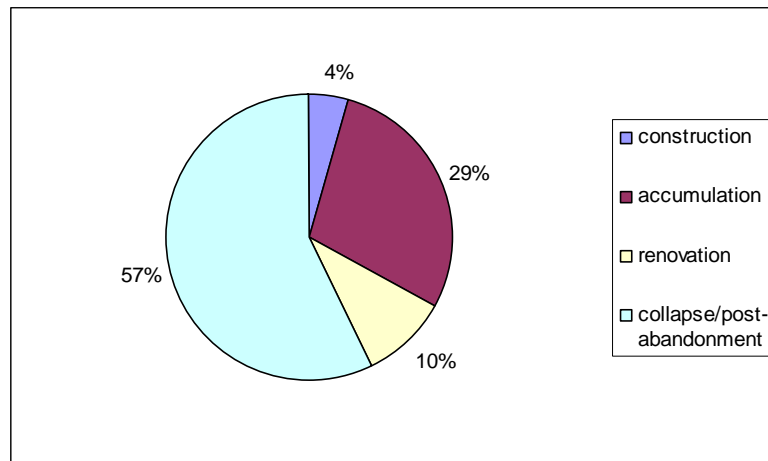


Figure 3. Percentages of artefacts by episode from all structures and periods at Kalavassos-Tenta. Only objects from the interior of structures are included.

³⁶ On the basis of geological analysis of soil deposits in post abandonment fills which consisted of straw and dung (Todd 1987: 123).

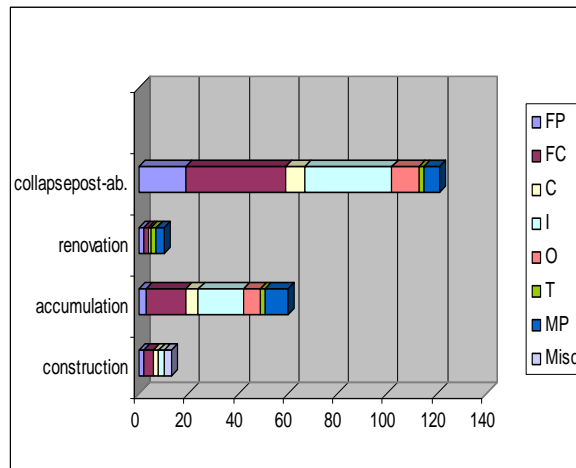


Figure 4. Occurrence of objects classes by episode from all structures and periods at Kalavassos-*Tenta*.

Registered portable objects and fixtures have been plotted according to their occurrence in individual episodes within the histories of the houses; their fragmentation patterns; and according to some broad functional categories. Artefacts from ‘closed’ contexts (burials, pits), as well as artefacts found stratified in extra mural areas, are treated separately. The following observations concern the contextual relationships between artefact deposition and house cycles.

- The majority of objects from building interiors (57%) were recovered in deposits associated with episodes of collapse/post-abandonment (see above fig. 3).

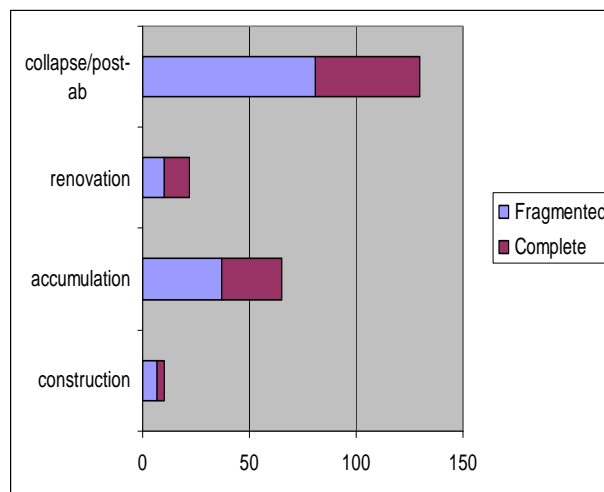


Figure 5. Fragmentation of artefacts by episode at Kalavassos-*Tenta*.

Most of the artefacts were fragmentary (see above fig. 5) and their occurrence in a number of buildings corroborates the post-abandonment pattern that was noted above where houses are left open and they gradually decay. The possibility that their shells were used as

informal refuse dumps is supported by the contextual and stratigraphic evidence and such practices are observed in modern villages today (South in Todd 2005: 314). South provides alternative explanations as to the occurrence of objects in the fills overlying the floors, such as the possibility that they had fallen from an upper floor or that they were stored in work areas that were higher up than the plaster floor. However, there is not enough evidence to support either of these scenarios (South in Todd 2005: 314). Objects belonging to the functional classes of 'industry' and 'food consumption' dominate the deposits, although most artefact classes are represented in collapse and post/abandonment episodes. A number of broken stone vessels, for example, and other food preparation equipment were found in the fill that accumulated, after the building's use, over the paved surface that Todd interprets it as a preparation surface for the reception of a wooden floor that would be appropriate for a granary (Todd 1987: 102).

The exception to this depositional pattern would presumably be buildings that are replaced by new ones without a great lapse in time between the two events, but we do not have sufficient comparative data from superimposed buildings to illustrate this. The only building with evidence of burning was Structure 66 and the dearth of objects in its accumulation deposits suggests planned abandonment and possibly deliberate fire, unless objects were removed prior to building its replacement structure 35.

- Limited number of artefacts comes from accumulation episodes (29%) and even less (10%) from renovation episodes (see above fig. 3).

This suggests that floors were cleaned prior to abandonment and in some cases, these efforts were more intense between renovation episodes or replastering a floor surface. We note that in period 2 greater attention to clearing interiors before abandonment is paid (fig. 25). In, earlier period 4 where accumulation deposits contain some objects there is a marginal difference between larger buildings with two piers and smaller ones in that the deposition in the latter is greater which might suggest that greater attention is paid in all periods towards clearing out the floor surfaces of more 'important' buildings. The sample size and information we have from completely excavated buildings, however, precludes us from making any further inferences. The deposition within the multi-period architectural complex on the 'top of site', shows that it had been subject to similar practices, if not more intensified practices, of cleaning out floors before abandonment, or in its case before replacement (fig. 26).

- Exceptions to the above processes that have removed objects from the interior of buildings are noted in certain cases such as structures 76 (period 4) and 35 (period 2), (fig. 25).

Structure 76, in particular, is of interest since its long sequence provides evidence for repeated re-plasterings; four at an early phase underlying the structure, at least one or two in the main phase of occupation, and a further patchy one after it was abandoned. The four early plaster floors were painted red and they were devoid of artefacts in contrast with the later surface which contained a number of fragmentary objects in both lower and upper fill. The contrast might be significant showing differences in abandonment attitudes between architectural units that might have been considered of 'special' or of some kind of ritual significance – e.g. red floors in pre S76, plaster floors of architectural complex, and 'everyday' domestic spaces (see Matthews 2005a, Hodder and Cessford 2004 for similar distinctions in Çatal Hüyük).

- A coarse comparison of the distribution of objects and features between interior and exterior space (fig. 28) clearly shows higher numbers of artefacts and features, notably hearths, in spaces immediately outside buildings or in narrow passages between buildings.

Thus, contextual information supports the observation above that boundaries between exterior and interior space were regarded as flexible at *Tenta*.

- Finally, deposition in 'closed' contexts (pits and burials) shows a higher number in pits which were more numerous in extra mural contexts in contrast to burials (figs. 29, 30).

Most artefact classes were represented in the fills of pits, with fragmentary, 'industry' related objects being more numerous. The small number of burials recovered at *Tenta* (14 in total, containing a minimum of 18 individuals) is found in both intra mural, as sub-floor burials, and extra-mural, as midden burials, deposits. 50% of the inhumations are associated with two buildings, S9 and 10. It is worth noting that not all inhumations were articulated, representing primary burials and not all bodies were deposited in grave pits (Moyer in Todd 2005: 5-6).

6.3 Ayios Epiktitos-Vrysi: History of Research and Settlement Layout

The second case-study comprises the settlement of Vrysi, located in the Kyrenia lowlands, in the northern coast of the island (fig. 56). It was excavated by Peltenburg between 1969 and 1973 following a small scale survey in the Kyrenia Lowlands. The initial aim of the excavation at the particular location was to investigate the occupational gap between the demise of the Late Aceramic period of the Khirokitia culture and the establishment of Ceramic Neolithic settlements of the Sotira culture. Along with the limited results of the excavations at Philia-Drakos A (Watkins 1969) it was hoped that fuller investigations from stratified sites, as opposed to the negative features of Philia-Drakos A and the limited excavations at Troulli (Dikaïos 1962), would produce proof for continuous occupation on the island between these two periods as opposed to the alternative of a depopulation explanation (Peltenburg 1972, 1975). However, this did not materialise since the absolute chronology, as well as the pottery, firmly placed Vrysi within the Ceramic Neolithic tradition, around 4,000 BC (tables 15 and 16). The excavations at Vrysi, nevertheless, have revealed very important evidence with regard to architectural plans, nature of occupation, social structure and, of particular interest to this thesis, a well-stratified sequence that point unequivocally to *repeated practices*. Excavations concentrated on the western part of the headland, where the main exposure of 575m² was located, revealing the existence of a, densely inhabited, subterranean, for most of its life, village with narrow passages between clusters of houses (fig. 60). Limited investigations took also place in two smaller areas further east, which both yielded architectural remains of the same period, suggesting that the occupation extended across the flat top of the limestone headland. Even so, the full extent of the site is unlikely to have exceeded 0.5 ha (Peltenburg 1975: 20). Although it is not known whether the excavated remains can be treated as a representative sample or merely as an indication of the utilisation of part of the promontory, on which Vrysi is located, the excellent preservation of the architecture and the superimposed floor plans perhaps compensate for the limitations of the exposure. Seventeen structures were excavated and the location of another four was indicated by partial exposure of their wall arcs. Apart from H16 and H13³⁷ that were excavated as part of the investigations outside the main area, all the buildings were found packed inside the Western Area occupying the deep, possibly human modified, hollows. There, clusters of buildings were physically segmented by a natural ridge, 3-5 m wide, running E-W across this part of the settlement.

³⁷ H: House.

The settlement of Vrysi was established in the early fifth millennium BC and was occupied until the late fourth millennium BC; hence the site was relatively short-lived. A series of 16 radiocarbon determinations (for calibrations see table 16) indicate an occupation span of between 260 and 390 years (central 50% of cal. probability distribution, see Knapp, Held and Manning 1994: 385). The internal stratigraphy of the site comprises three phases on the basis of absolute dates and stylistic similarities of ceramic wares (Peltenburg 1982b). The short occupation span that we are dealing with along with the, relatively clear, deep stratigraphy that demonstrates a series of buildings and rebuildings on the same locale afford an analysis on the micro-scale level, that is, on the biographies of individual buildings as they interrelate with the daily practices and the life stages of their occupants.

A deep stratigraphy that was partly, but certainly not entirely, the result of the topographical configuration revealed columnar stacks of houses the earliest of which were completely subterranean. The continuity of building traditions and the conditions and sequences of abandonment and rebuilding, in an unparalleled, at least within Cyprus, vertical form has been repeatedly emphasised by Peltenburg (1985, 1993, 2003). The observed continuity of habitation was made explicit by the excavator's decision to record the successive buildings in the same locus not as separate entities but as one house with multiple phases of habitation, even though in some cases particular care was taken to obliterate earlier houses before erecting new walls. Therefore, the superimposed buildings in a given location were assigned a single number followed by another consecutive number that describes the occasion of rebuilding a new stone wall. This way the continuity, both in terms of location and function, of the uninterrupted habitation inside the 6m hollows was reflected in the stratigraphic analysis (Peltenburg 1982b:5).

In this account, I largely follow this system but, in some cases, I examine the structures as these are defined by the erection of new walls and suggest the possibility that major refurbishments are associated with the decisions of different inhabitants, probably new generations, opting to accept, refute or alter links with the past. In other words I regard the life histories of houses to be intimately, linked with the life histories of people who resided in them and similarly, in accordance with the research aims of this thesis, I view the tangible or remembered remains of the past to be an integral part of the prehistoric present that generates and reproduces the 'meaning horizons' within which people were always situated (Munn 1992).

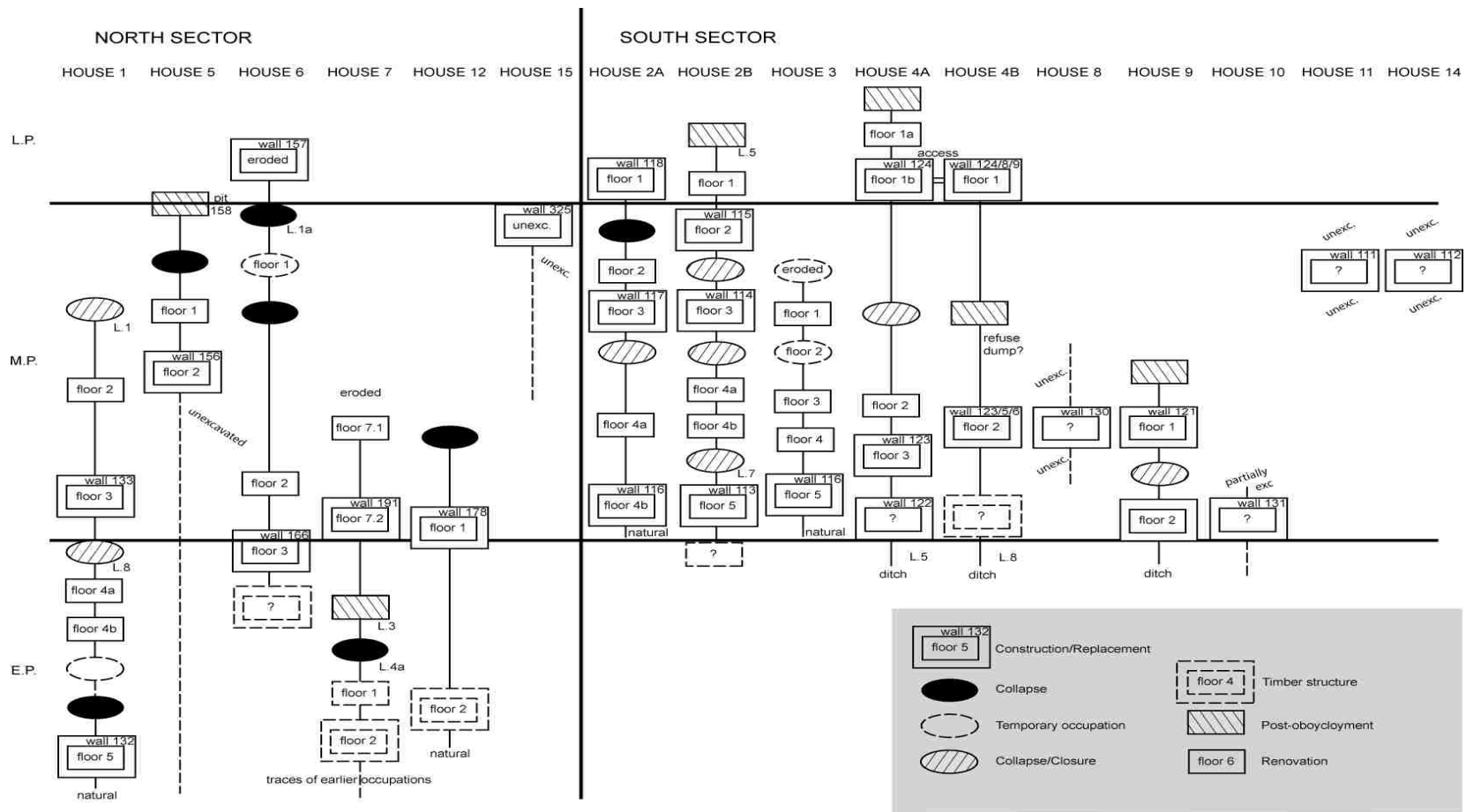


Figure 6. Diagram of house replacement at Ayios Epiktitos-Vrysi by phase.

6.3.1 Replication types and house ancestry (tables 5-6, 22-23, figs. 6, 60-63)

	Phase	Cultural Period	Single	Double	Triple	Ruins/ Unoccupied
North	Early	Late Neo	4	2*		
	Middle	Late Neo		3		
	Late	Late Neo			1	1
South	Early	Late Neo	1?			
	Middle	Late Neo	9			
	Late	Late Neo		1	3	

*Note that possible timber buildings are also included in the count even though the excavation was incomplete and the evidence inconclusive.

Table 5 Summary of longevity of house occupation at Ayios Epiktitos-Vrysi

House replacement on the same location and with the same wall alignment ('repeated' type) is practiced in both sectors of the settlement and throughout the village's life. Table 22 lists the details of continuous occupation and the predecessor of each building. As noted above the topographical configuration divides the settlement by way of a natural central ridge. The two sectors remained segmented by the natural ridge throughout the life of the village, therefore, they cannot be linked stratigraphically. Peltenburg has assigned them to contemporary chronological phases on the basis of the ceramics' stylistic attributes and C-14 dates (Peltenburg 1982b: 106). There is no evidence of a general destruction level in either sectors. In the north sector, six complete structures were excavated and parts of 3 wall arcs belonging to another 3 buildings were located. The chronological evidence suggests that occupation was initially confined north of the ridge with a ditch and a retaining wall forming the southernmost limit of this initial settlement (Peltenburg 1982: 37-8, 55-7). The south sector seems to have been occupied later, during the Middle Phase, where 9 buildings were located and part of a further 2. Occupation in the northern sector continued uninterrupted. Around the same time the ditch, was abandoned and part of it, was built over. During the Late Phase there is very limited evidence for continuous occupation in the northern sector, while further rebuilding took place in the southern sector. The shift to the southern sector appears to be one that involved the construction of new buildings at about the same time, as opposed to a gradual process of accretion (Peltenburg 1982: 57) while the community in the northern sector continued to occupy the older part of the headland. Of course, this communal shift to the South sector is expressed in archaeological terms and

stratigraphic conventions which, by definition, are not equipped with a fine enough scale to be able to follow these developments in *generational time*. It is more likely that such a shift occurred as the settlement grew and successive generations established new households south of the ridge. That this was not contemporaneous is supported by the stratigraphy of Passage A, where H2A and H2B are the primary structures, H9 followed and it was not long before H3, H8 and H10 were built (Peltenburg 1982b: 57).

Phase	Repeated	Repeated/Altered	Continued	Displaced
North	5		3	
South	4	4	1?	7

Table 6. Summary of Replication Types at Ayios Epiktitos-*Vrysi*.

Summarising the results, we see that most buildings that started their life in the **Early Phase** were built above earlier occupation, possibly timber framed buildings, at this stage (**'continued'**). All of them survive in the **Middle Phase**, with the rebuilding of new walls and successive renovations taking place (**'repeated'**). 11 buildings were established in the **South sector ('displaced')** with two of those built above traces of earlier occupation, again possibly timber. In the Late Phase only 1 or 2 buildings survive in the North sector while the others are abandoned or more informal occupation took over, while in the South sector 4 buildings survive in the Late Phase, all of which had a history of longevity of a triple generation of house by that point (tables 5, 6, fig. 6). Unfortunately, not all houses have been excavated down to natural and not all houses retain traces of their latest occupation due to erosion or limited excavation. Consequently, this is a mere indication of the minimum number of superimposed occupations and successive generations, but their longevity and the continuation of a 'house ancestry' is clearly observed in each case.

House 16 was excavated outside the densely occupied Western area and the typological characteristics of its latest occupations place it in the Late Phase, which suggests that the settlement expanded in previously unoccupied areas although we cannot say when this expansion took place. We have to be cautious about postulating such an expansion since the earliest floors of House 16 were not reached. But what we can suggest is that more buildings survive in the Late Phase and this phase might have been more substantial than the numbers suggest for the main area of excavation. In addition, in Area IV trial excavation produced evidence for another possible cluster of buildings, similar to the hollows in the

Western Area. In a similar fashion, the marl headland was cut to a probable depth of 5m where clusters of buildings were located (Peltenburg 1982b: 58-9). Again, on the grounds of the present evidence, we cannot say whether these were contemporary with the Western Area, in which case we could be dealing with discrete social groups, kin or some other form of relatedness (marriage, sibilingship) following a pattern of house ancestry in discrete areas. But this has to remain a conjecture.

Even with such an incomplete sample a tentative observation concerns the variability in terms of the buildings' replication patterns. All the 'repeated' type buildings were built following roughly the same wall line as their predecessors. In most, the hearth, bench and other features retain the positions of the previous building, as the result presumably of direct observation on the part of successive generations of inhabitants. Re-buildings with a more vague memory with slight repositioning of features, without changing the 'ideal' earlier plan are also noted. Certain replacements though are more radical ('repeated/altered') with the hearth in different positions and/or pebbled areas covering previous arrangements. We need a bigger exposure to be able to compare these practices across phases and sectors, but it seems that more individuality and variability in house replacement practices is observed in the 'displaced', later, occupation in the South Sector.

Finally, an interesting practice, is that renovations, or even rebuildings (e.g. House 2B) seem to 'remember' the position of features not necessarily of their immediate predecessor but that of much earlier fixtures. For an example, in House 2B the immediate use of space following house replacement (H2B-113, floor 4) does not follow the earlier (H2B-114) position of fixtures and it is not until H2B-115 that a hearth is built on exactly the same location as in the time of 2 or 3 generations before. Finally, the hearth is sealed again under a pebbled surface, repeating a practice that was noted in the first house, which was buried by now under the remains of two superimposed buildings.

6.3.2 Overview of Episodes: Continuity and Discontinuity (Appendix D)

The following episodes are presented below, according to the structural sequences of buildings independent of the internal phasing of the site. Hence, their structural phases and inferred life stages are discussed from the construction of that building to its abandonment, whether it started its life in the Early, Middle or Late phase. It has to be noted that since no site-wide destruction horizons were recorded and since no chronological break of

occupation was detected between the three phases, it is safe to assume that the site represents the continuous development of households or certain domestic groups, whatever their residency pattern was, over the time of roughly 10 -13 generations. This will be examined in more detail below. Finally, not all buildings undergo the same process that is represented in the abovementioned succession of episodes. For the sake of clarity, however, an idealised succession is presented here that was observed in the majority of buildings. However, in contrast to *Tenta* that was studied above, most buildings show remarkable similarities in the sequence they follow.

Construction

The initial construction involved a massive operation of terracing and opening trenches as deep as 6 m, in some cases, into the natural core. This process would have undoubtedly been a communal effort, since the hollow in the North sector involved extracting a minimum of 285m³ of calcareous marl, whilst construction in the two South Sector hollows, during the Middle phase, would have required the extraction of 1100m³ (Peltenburg 1982b: 11). The only building that was founded on natural and could be taken to represent a 'founder' house, was the pre-stone phase of House 12 in the North sector, but this limited evidence reflects the nature of excavation and the fact that the structural details of the earliest phases were not revealed or their preservation was too poor to recover any floor plans. In some cases, however, the erection of timber-framed buildings or the existence of some form of more ephemeral occupation on the site is implied by the outlines of fallen timbers sealed beneath subsequent occupation. The best evidence for timber-framed structures is found in House 7 in the North sector, which contained fourteen timber ghosts with lenses of silicates between them and fragments of mineralised wood. The radial pattern of the collapsed timbers suggests the existence of a conical superstructure (Peltenburg 1982b: 222). Similarly, Houses 1 and 6, both located in the North sector were founded immediately above the remains of earlier occupations and while it is difficult to reconstruct the details of these phases, the use of timber and the absence of rubble collapse suggests timber framed structures. The earliest preserved phases of buildings in the South sector, when the settlement expanded southwards during the Middle Phase across the natural ridge, are from buildings associated with stone architecture, but very scanty evidence below these suggests again some activity prior to the better preserved stone buildings. While chaff fragments below House 2A might not have been *in situ*, two posts

from the levels below the neighbouring House 2B suggest the structural use of timber for shelter. These early levels, however, were either reached in limited sondages or they are not very well preserved, hence we have no information as to the nature of continuity between these and the succeeding better preserved phases.

Foundations for stone walls were found in House 2A in the form of a 0.6m deep trench dug into natural. In some cases a floor make up was employed as preparation for the main surface. The floors themselves were not very well preserved since they were not plastered but consisted of beaten earth. Grass silicates were found, on some floors, like that of H2A, indicating some sort of grass or straw carpet. Wall construction involved the use of medium to large limestone slabs as well as calcarenites. Most walls were plastered in the interior with mud and havara plaster. The construction techniques were not uniform and some walls were unevenly laid with smaller limestones while others were more regularly bedded or larger slabs were used. The upper part of walls was constructed of pisé. In some cases, the masonry was not consistent, exhibiting the use of different styles. However, considerable effort and technique would have gone into the construction of the structures since the builders would have had to take into account the sloping surfaces of the promontory and their decision to locate them so close to each other in such a restricted space meant that the wall curvatures would have to fitted between the adjacent contemporary buildings. Consequently, the shape of the buildings varies due to the restricted space available for construction, from rectangular with rounded corners to elongated, sub-circular or in the case of House 2A triangular. Apart from House 16, which was dug outside the main Western area, the vast majority of structures were contiguous with neighbouring buildings and this is more pronounced in the South sector where some walls were bonded with those of adjacent buildings as in the case of Houses 3, 2B and 14. Access to the buildings was by means of gaps in the walls, approximately 40-60cm wide and their orientation was largely determined by their position in relation to the narrow passageways. No entrances were noted from the early phases of some buildings but this might be due to limited excavation. Alternatively, access from the rooftops could have been used as in the case of Çatal Hüyük (Mellaart 1966), but this would not have been the norm (Peltenburg 2004: 105). The reconstruction of the superstructure is less clear but evidence from the pattern and composition of the collapse debris in the interior of buildings suggest flat mud roofs with reeds supported by timber posts and the walls. Some evidence though suggests that, as in the case with the timber framed building mentioned above, a conical

roof cannot be ruled out and in H1 there is some evidence to support this (Peltenburg 1982b).

Accumulation

Due to the constrictions in space there is some variability in the house size and shapes. Hence some houses were 25m², like House 4A while others had a roofed area of only 7 m², like House 2B. Based on an average figure of all houses in the range of 14.2 m², 2.3 persons could reside in the dwellings (according to Kolb's 6.12m² per person figure, 1982), which seems too low but if we consider that some houses might have had lofts than the number of people that could have resided there would have been greater. Peltenburg has suggested that the houses were probably occupied by nuclear families (Peltenburg 1982: 102, 1978). All houses contained a number of installations and furnishings and there seems to be relative uniformity in the number and type of furnishings present in most houses. Imposing platform hearths were located off centre, usually in the SE, with benches and/or stone settings used as seats in an arc around the hearth. Subsidiary smaller fireplaces, basins and bins were also present in most houses. Based on the evidence of the artefactual classes that are represented in the assemblage from the occupation phases we can infer a variety of 'domestic' tasks being performed within the enclosed space of the dwellings, including food preparation and consumption as well as crafts such as textile production, bone, stone and wood working, and pottery manufacture (fig. 8). It appears thus that most dwellings could be regarded as 'general habitation units' (Peltenburg 1985: 58). It is worth noting that the classes plotted in the graphs (fig. 31: a-k) are more or less represented in all houses and although there is some variability in terms of quantities between houses and between sectors, it is not possible to detect any significant patterns that would suggest that there are houses that seem to specialise in certain crafts for example (*cf* Peltenburg 1985).

Renovation (table 23, figs. 6, 60-63)

The next stage recorded in the life of most buildings at *Vrysi* is associated with the practice of raising the house floor levels in tandem with raising the entrance thresholds. The excavator has interpreted this practice as a measure for dealing with the rapidly accumulating wash deposits in the passageways. Since the only access to the buildings is from these paths, the rising levels of mud wash and rubbish would have threatened to block the only entrances to the buildings (Peltenburg 1982). In terms of continuity regarding the

use of space between floors, we note that there is some variability in spatial practices. In some houses the entrance threshold, floor level and hearth are raised without changing the initial use of space and indeed some of the features continue in use in the succeeding floors with minor alterations. In other houses we note considerable differences in the arrangement of space between the two phases, which might be taken to denote the changing needs of the domestic group as this grows and changes. Further variability is noted in artefactual deposition within episodes of renovation. In some buildings, the sealed floors are devoid of artefacts or there are very few, presumably because like the features they are curated and recycled in the next occupation while in others earlier floors are sealed without removing the portable objects and as we shall discuss in the contextual analysis below this practice cannot be explained by the rules of functional expediency and discard alone (Peltenburg 2001).

Examples of the abovementioned practices can be seen in the following renovation episodes. In House 1-132 where the floor (4b) and the threshold were raised by about 10cm, the hearth was rebuilt but its off centre position near the eastern wall was retained and most of the other features of floor 4b like the stone seats around the eastern side of the hearth and the posts continued to be in use in the new floor (4a). The floor had been cleaned of its contents before renovations took place. House 6-166 In House 5-156, when the floor (2) was raised by about 28 cm along with the re-structuring of the entrance, the hearth was still protruding in the next floor (1) and while some of the features of the previous floor (2) were sealed over and were not in use anymore, others, like the wall bench were repaved and continued in the next phase (fig. 61). Portable objects were left on floor and sealed by the next one. Caches of axes were concentrated against the south wall and as the excavator notes some of the numerous handstones had barely been used (Peltenburg 1982b: 29). In House 2B-113 (fig. 63) there is a succession of three superimposed floors. Approximately 40 cm above the earliest floor (5) two successive phases of occupation were distinguished (4b and 4a). In the first of these (5) a partition wall with its own doorway closed off the South part of the house while in the North a platform hearth was located with a bench in the opposite wall. In the second phase (4b) spatial arrangements were different with a small partition wall in the opposite side of the entrance closing off the North part while the main platform hearth was located in the SE corner of the floor. The last renovation (4a) saw the deliberate sealing of the hearth with a layer of clay and stones while other features continued in use. Hence, we see successive renovations and re-occupations that although

the basic 'memory' of previous arrangements is retained this is neither universal nor is it always the case.

Collapse/Closure

Abandonment normally followed collapse of the walls and/or the superstructure. Only in very few cases was a break between two occupations noted, suggesting that the norm was that houses would be rapidly reoccupied after structural collapse, or that they were resurfaced and maintained at regular intervals. In some cases such collapse was partial and gradual with increasingly unstable walls tumbling in the interior. In House 6 for example, the intervening rubble and ash fills, between the three superimposed surfaces of occupation, suggest that the collapse of the walls was a gradual and recurrent process. Attempts to strengthen the derelict, built on a slope, wall are evident by the construction of a buttress against the south wall (Peltenburg 1982b: 219). Likewise, in House 12-178 the consistency of the deposits above the last floor of the dwelling (fl. 1) reveal recurrent wall collapses alternating with a series of more ephemeral occupation surfaces. The pattern of collapse in two houses, however, (Houses 1 and 7) suggest that destruction was full-scale and relatively sudden, judging from the succession pattern of the wall and roof collapse deposits immediately above the features and finds on the floor surfaces and by the amount of crushed pottery on the floor (Peltenburg 1982b: 23).

A recurring abandonment pattern that is observed in several dwellings is when collapse and abandonment, followed by either major rebuilding or partial alterations, appear to have been more purposeful acts. Stratigraphically, this is observed in the matrices of deep fills between episodes of abandonment and re-occupation that contain the remains of the collapsed walls and the superstructure. The consistency of these fills differ from those of anticipated collapse and abandonment in that they consist of hard, compacted soil that is normally devoid of artefacts or domestic refuse and in certain cases they have been horizontally levelled with crushed *havera* (House 1-132, Level 8, above floor 4a), presumably to provide an even surface for the next building but they could also be seen as a practice that further accentuates the intentional obliteration of past occupation. The same fill texture is observed above the last floor of House 1 where the compact surface immediately above floor 2 received the debris of the roof collapse³⁸. The deliberate character of these

³⁸ Note that this surface was given a floor number by the excavator although he states that this does not represent a floor surface given the lack of any features associated with it (Peltenburg 1982: 205)

abandonment episodes is further supported by evidence of wall rubble that had been carefully laid over the floor surface (House 2B, Level 4), as opposed to the more random pattern of wall collapse in other buildings. These fills are normally between 0.80 and 1.10m deep and lack the usual refuse that slips through looser deposits. There is also no evidence for post-collapse disturbance in the form of pitting or scavenging for building materials, for example. The significance of these 'closure' episodes and their interpretation as triggered by certain events such as the death of an occupant (Peltenburg 1985, 2004) other than the practical need to replace unstable structures or to raise the floor levels can only be considered in conjunction with the contextual evidence that is presented separately below (6.3.2). In any case, an initial observation is that no efforts were made to dispose of the debris outside the building or the settlement but everything is kept as part of the structural and 'living' history of the dwellings and the house groups concerned.

House Replacement (tables 5-6, 22, fig. 6)

The demolition of the previous buildings involved only the dismantling of the roof and the upper pisé walls, while the remaining stone walls, which were preserved to a height of 1.70 in some cases (e.g. H1-132, see tables 22-23) received the walls for the new building. The re-building of new walls on the stubs and with the same alignment of their predecessors, which in terms of their archaeological signature give the impression of columnar stacks, suggest that house replacement was practiced and perhaps controlled within individual domestic groups. Indeed, such was their precise alignment that the excavator has noted the difficulties in distinguishing between different phases of building activity that in the end involved the removal of the wall mud plaster in order to differentiate the types of masonry and their phasing (Peltenburg 1982b: 202)³⁹.

This pattern of precise alignment was noted in all buildings with more than one phase of wall construction. In studying, however, the continuity of floor arrangements between the last floor of the previous building and the first floor of the succeeding one there is a more variable pattern. Tables 5-6 provide a summary of the replication patterns (see above). In short, there are certain dwellings that can be termed 'repeated' houses on the basis of the repetition of the major features of their predecessors, while in some cases the

³⁹ In preliminary reports this was not noted, which led to exaggerated wall heights (ibid 1972).

differences were more pronounced so that they are termed 'repeated/altered' houses⁴⁰. An example of the first replication type is House 1 where after the deliberate closure that was noted above, the house was rebuilt, the walls following the same alignment as in the previous one, the entrance is rebuilt above the earlier blocked one, while the position of the hearth remains that of the previous floor and in addition it now appears to have been elaborated with the construction of three benches in a radial pattern. Similarly, in H2A the position of the hearth and possibly the entrance are also retained, after H2A was rebuilt and again it seems that the hearth is more elaborate than the previous one, although some other features were added that were not in place in the earlier building. This continuity is not always the norm as shown in House 2B where the sealed hearth of the last floor of House 2B-113 was never replaced in 2B-114; this area was kept devoid of features or finds, while a new more temporary fireplace was located in the opposite side of the wall.

This sequence of rebuilding, followed by a number of renovations where floor levels and entrance thresholds were raised, then deliberate demolition and the compaction or levelling of the debris before rebuilding again was repeated two or three times in each building, until the settlement was abandoned. There is no need at this point to assume that these were subject to formal inheritance or property rights as there is no evidence for social hierarchy at this stage.

Post-abandonment

As noted above, evidence for post-abandonment activity is limited as most of the houses were rapidly re-occupied after collapse. Where breaks between re-occupations do occur, more ephemeral occupation could be inferred in either the partly roofed abandoned structure (H6-166, floor 1) or in its shell (House 5). The latest phases of the buildings have been eroded but in general, from the evidence available, it does appear that the succession of occupations and the deliberate demolition and sealing of collapse debris did not allow for the buildings to remain open for any length of time or to have been used as refuse dumps. The exception to this might have been House 4A and its adjoining annex 4B.

⁴⁰ Note that this pattern is by no means conclusive nor does it have any statistical significance since it is highly affected by excavation bias. The upper floors of most houses were not very well preserved or were completely lost to erosion; hence we could not observe their continuity.

6.3.2 Contextual Analysis (tables 24-25, figs. 7-11, 31-34)

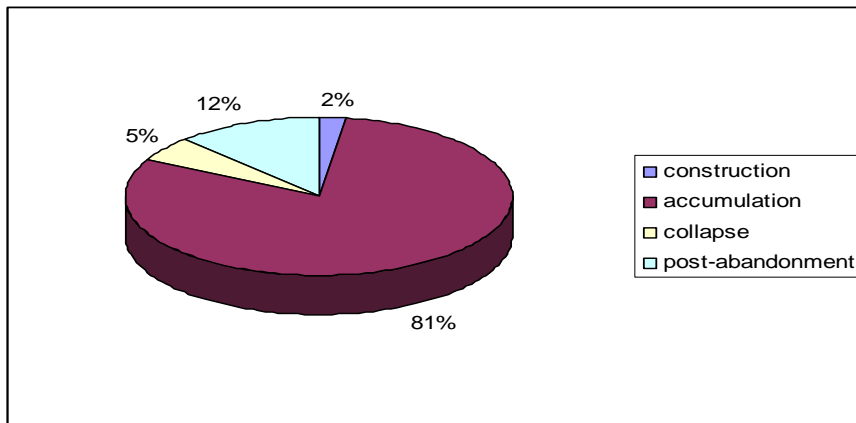


Figure 7. Percentages of artefacts by episode from all structures and periods at Ayios Epiktitos-Vrysi. Only objects from the interior of structures are included.

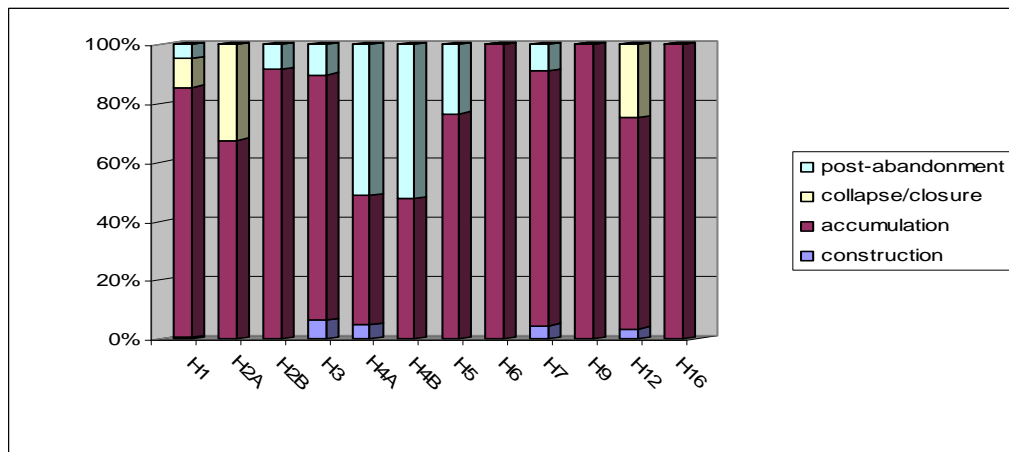


Figure 8. Graph showing the contribution of each episode to the total assemblage of individual houses. Note that accumulation includes occupation and renovation episodes and the objects were associated with floors and their fills immediately above. Only registered portable artefacts are included.

The present analysis has considered the artefactual evidence from all the floors first by episode from all buildings and then by episode in each house. This is followed by a quantitative assessment of overall object fragmentation by episode and by house. Finally, the distribution of certain types of artefacts is examined from episodes of renovation by house and episodes of closure of the type noted above. A series of observations summarising the results, concern the following:

- The vast majority of objects that were found in house interiors (81%) were recovered from accumulation episodes compared to construction, collapse or post-abandonment episodes (see above figs. 7-8).

The exception might be House 4A and its annex 4B in both of which the sequence of episodes differ from the patterns that were observed above. House 4B might have been a yard for most if not all of its life. The space was used as a dump for refuse from the adjoining H4A with which it was linked in its later stages by means of an entrance to the east wall. House 4A had a history of three superimposed buildings and a total of five floors. The floors, however, did not yield many objects while most of the artefacts from House 4A are derived from the uppermost level 'S' which represents post-abandonment occupation that was disturbed and eroded. For all other buildings the majority of their assemblage derives from accumulation episodes. In this case, accumulation refers to 'floor' horizons, so including renovation episodes and their fills immediately above the floors. The latter, it is worth repeating, represent the last stage in the life of the particular floor horizon, or rather the conditions and the state of its abandonment. It has to be noted, at this point that, at Vrysi, the distinction between floor and fill was often problematic as horizons were sometimes blurred (Peltenburg 1982b: 202). Nevertheless, the fills above floors, between levels, were not usually exceeding 0.3m, sometimes as little as 0.1m⁴¹, hence the material is taken to belong to the last phase of occupation. Furthermore, there is rarely a break between occupations to suggest that the houses were left open for any length of time to accumulate secondary refuse from other areas. Consequently, although minor inflation in artefact counts might be expected, generally it would be safe to assume that this would not be sufficient to distort the total figures to a significant degree.

- Certain occupation horizons within individual buildings yielded a considerably higher number of objects compared to other floor horizons within the same building (figs. 8, 31: a-k).

There is no uniform pattern thus that governs all deposition of objects upon abandonment. At the same time, a coarser comparison between all floors from all houses do not reveal pronounced differences that would attribute any 'special' circumstances to any individual building. In other words, all houses produced evidence for the same kind of sequence as described above and supported by the contextual evidence, whereby some floors yield higher number of objects. What we can observe, however, comparing the floors with the highest occurrence of objects from all houses is that a general pattern emerges. The highest occurrence of objects is noted in most, but not all, floors that were either raised under the renovation episodes, or sealed off by deliberate demolition and buried under the

⁴¹ Excluding the over 1m deep sterile fills that represent collapse in which case the stratigraphy was clearer.

compacted sterile fill noted above under the collapse/closure episodes. More specifically, floor 2 in House 1 in the North sector was deliberately sealed under 1 m of compacted debris and represents the last occupation in one of the longest-lived sequences in the settlement. Likewise, floor 4a in House 2B, the first of the three superimposed stone buildings, in the South sector was similarly sealed and possibly burned⁴². Prior to this particular care was taken to seal the platform hearth.

Thus, with respect to the variable distribution of objects within the floors of individual houses, it appears that, depending upon the different circumstances and stages within the developmental cycle of the group, certain events would have produced these differential patterns in the life history of a dwelling. With respect to the general pattern observed regarding the practice of sealing objects under subsequent occupations, it seems that there is a wider social 'norm' that lasts throughout the life of the village, whereby objects are not curated but 'kept' as an integral part of the biography of the buildings, the same way perhaps as the collapse debris is not disposed outside but retained within the house and below subsequent occupations. It is important, therefore, to contextualise these general and particular patterns of abandonment as part of and not separate from the life stages of their occupants on one hand and the transmission of social practices that transcend the life time of individuals within a particular generation, on the other. It is in these episodes of renovation and closure that the incidence of complete objects is higher (75% and 65% respectively) compared to broken ones (fig. 31 a-k, below 9-10).

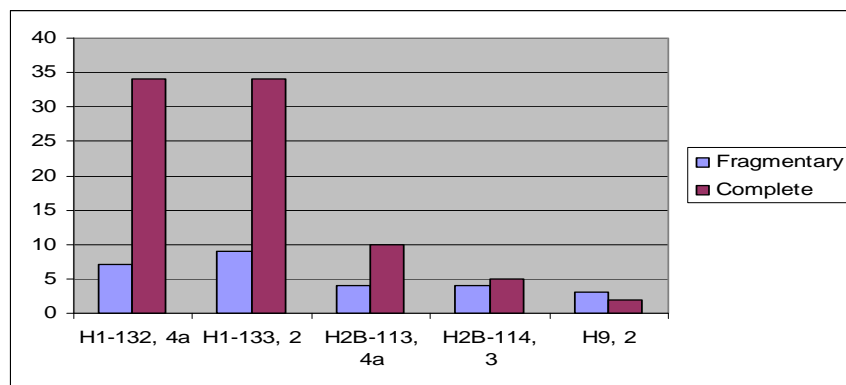


Figure 9. Fragmentation of objects found *in situ* sealed by episodes of renewal closure.

⁴² There is some evidence to suggest that limited burning took place of at least the superstructure. This is supported by the discolouration noted in the pisé fill (Peltenburg 1982b: 44)

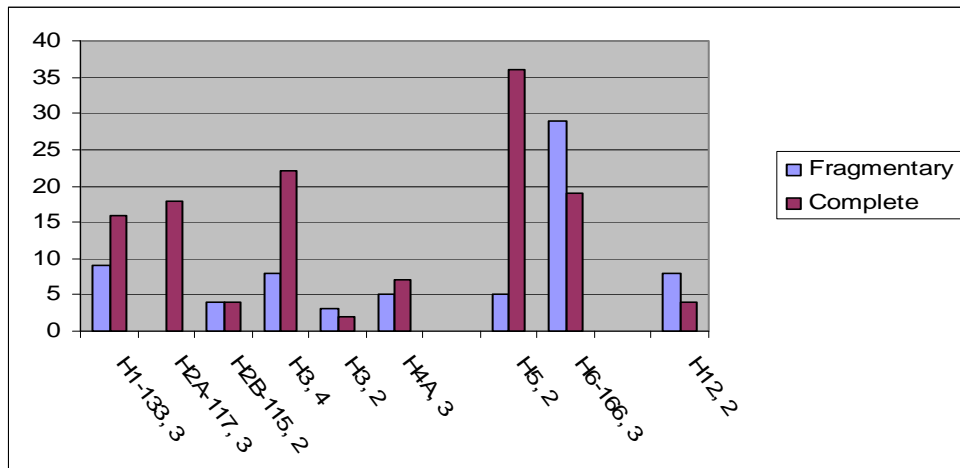


Figure 10 Fragmentation of objects found *in situ* sealed by episodes of renovation where floors and entrance thresholds were raised.

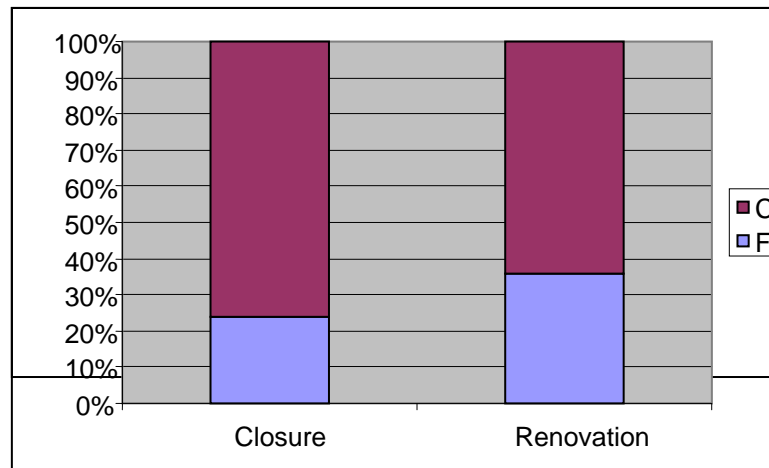


Figure 11 Percentages of complete and fragmented objects from all houses by closure and renovation episode. F= fragmented objects, C= complete objects.

The ramifications of this observation are well known in the archaeological literature of modes of abandonment and their effects of the formation of the archaeological assemblage as discussed in chapter 2. In the present context of Vrysi, Peltenburg (2003) has recently argued that the ‘least effort model’ that dictates what is curated and what is abandoned as de facto or secondary discard based on its cost and the ease of its replaceability (e.g. Schiffer 1996, Tomka 1993, Kent 1993, Stevenson 1982) do not appear to apply here. He suggests that some other explanation must be sought of the kind that is structured by ritual behaviour. The results of the present analysis agree with this line of reasoning although it should be said that a lot more work needs to be done in order to assess the fragmentation patterns of

the artefacts in conjunction with a finer delineation of the stratigraphy as opposed to the rudimentary level of complete/broken (see Webb 1995, 1998, Jackson 2003).

- Some classes of objects are either under represented, like complete or near complete pottery vessels, as well as stone containers, while others might be over represented as the result of, for example, caches of rubbers or axes, numerous needles and pottery disc left on floors before either a renovation or a closure and re-building episode (table 25, figs. 32-33).

Contextual information of sherd counts were not available in the publication, hence we could not infer minimum numbers of pottery vessels represented in house floors, but the fact that they are absent or appear in limited numbers, in certain houses and certain floors at least, has also been noted by the excavator (Peltenburg 2003: 112-114). Nevertheless, the over-representation of certain classes of objects is a logical conclusion rather than a paradoxical situation, since, if we accept that these objects were intentionally left behind rather than subject to the processes of loss and refuse, then we would expect to see what Lightfoot (1993: calls 'abandonment assemblage enrichment'. The under representation of certain artefact classes applies to the most obvious class, ceramic containers, that would be expected to comprise a significant percentage of a normal 'domestic' inventory. Again, if we accept that it is not always practical circumstances that accompany the abandonment of a house than we should expect to find depleted inventories. In other words, as LaMotta and Schiffer argue, ritual behaviour, in terms of its effects to the archaeological record, is both a depletion and an accretion process (LaMotta and Schiffer 1999: 24). What is more difficult, however, and more interesting to an exploration of the biographical qualities and the mnemonic potencies of objects, is to be able to identify the meaning that was attached to certain classes of objects, hence to understand the criteria and the social practices that underlies when, how and where some objects are to be incorporated or excluded.

- The vast majority of objects and features were found within the houses' interiors compared to extra mural contexts⁴³ (fig. 34).

The latter mainly come from an open space Area VD-E, within the South Sector, located towards the centre of the headland. The upper fills covering the area comprised erosion products and slope wash (I), whilst lower down (II), a number of objects as well as concentrations of shell and bone probably represent middens and refuse disposal in the

⁴³ Only objects which were stratified in extra mural surfaces and contexts are included. Objects that derive from the higher fills of buildings, representing post-abandonment episodes, are plotted as intra mural even if in some cases the shell of an abandoned building could have been used as open space.

open space. The lower deposits (III) reveal paved surfaces and temporary fireplaces and lamps. The excavator notes that the midden deposits from level II contain a wide range of artefact classes suggesting that selective refuse deposal would have taken place in this area (Peltenburg 1982: 52).

- There is very limited information with regard to closed contexts from negative features (fig. 34).

No burials were found in any part of the settlement. If burial customs are the same as at *Sotira-Teppes* (Dikaios 1961) where grave pits were concentrated in an area reserved as a burial ground, in close proximity to the settlement, then such an area may well exist at Vrysi somewhere within the area of the headland. At another Ceramic Neolithic site though, *Kantou-Kouphovounos*, single inhumations were excavated within the buildings, as sub-floor shallow grave pits, as well as outside but in close proximity to specific houses (Matzourani 1994, 1996), both of which are absent at Vrysi. The majority of pits were recovered from the interior of buildings, although they were mostly dug from higher fills that represent post-abandonment episodes and they contain few artefacts, ash, bone and stones.

6.4 Discussion: *Repeated practices at Tenta and Vrysi*

The two Neolithic sites that were examined in this chapter, *Tenta* and *Vrysi*, reveal interesting glimpses into different practices of house replacement and spatialised ancestry that would have undoubtedly affected how people perceived and transmitted the past. Their marked differences are due to a variety of reasons, not least because of their chronological separation by three millennia and the discontinuous development of the Neolithic period in Cyprus (table 6). No attempt is being made at this point to explain these diachronic discontinuities and differences; instead, keeping on the micro-scale theme, some observations are offered reflecting upon how the archaeological sequences that we saw can be attributed to the conscious or habitual sequences of actions of the individuals and communities concerned.

6.4.1 Memory and *place* at *Tenta*

Continuous practices at *Tenta* are attested in two areas: the dwellings and the large architectural complex at the 'top of the site'. A limited number of the small domestic

buildings at Tenta were built enclosing their predecessors. No lengthy gaps were noted between replacements; hence this method can be attributed to direct observation on the part of the builders and to their decision to align the walls of the new buildings so as to 'contain' the previous ones. This practice may reflect the changing needs of households for more space but has the consequence of creating an ancestry of the house, a spatial precedent. There is no evidence pointing to this practice being subject to formal inheritance of property at this point. The raised floor that was observed in some buildings, at the point where the underlying walls cross over, might have been entirely **unreflective**, coincidental or simply an error of construction, but again it would have created a visible and bodily reference to the previous arrangements (e.g. in S35 and S75).

Although the occurrence of numerous extra mural work surfaces and hearths points to a flexible use of bounded and exterior space, there is considerable evidence to suggest that the interior space of the houses was well maintained. A series of floor and wall replasterings (some with the remnants of red painted floors and a pillar with anthropomorphic mural decoration) and the addition or demolition of central pillars, platforms and outer house walls offers glimpses into the dynamic nature of houses and the notion that is repeatedly encountered in the ethnographic literature of the 'growing' or 'living' house (Waterson 1990). The sample is too limited to make any inferences about the timing or nature of these events; for example, one structure (S27) was replastered 4-6 times and its occupation is associated with two phases where the position of the pillars changes. Assuming duration of under approximately 200 years on the basis of the duration of period 4, we could tentatively say that such refurbishments would have taken place every three to four generations. Whether biographical (accompanying changes to the developmental cycle), or practical, or a combination of both, the above evidence for continuous refurbishments and transformations illustrates a concern with interior space which has perhaps been understated in the literature⁴⁴.

This concern is not matched by the manner in which dwellings are abandoned and left to decay using them as refuse disposal areas. The contrast between the 'clean' interior spaces of recently abandoned houses as we saw from the contextual analysis and then, soon after, becoming 'dirty' disposal areas might be significant, reflecting specific cultural beliefs

⁴⁴ The occurrence of the majority of features and objects in the exterior spaces (fig. 28) and the dearth of objects and installations in the small space of the structures is taken as reflecting activity areas and use of space (e.g. Bolger 2003: 91) where the pattern indicates that most tasks are undertaken outside rather than inside the buildings (LeBrun 1981).

and cosmologies associated with the 'life' and 'death' of the house. It is certainly informative, for our purposes, in understanding house histories and their perception in the past at different stages within their sequence. From a 'biographical' perspective, therefore, we have to consider the possibility that the 'clean' floors of the houses and the 'cleaner' interiors of the successive buildings of the architectural complex 14 (see Byrd 1994: 656-7 for similar depositional patterns from the nondomestic buildings at PPN Beidha) might reflect processes other than recycling according to least-effort models. 'Ritual depletion' (LaMotta and Schiffer 1999: table 2.1) and cultural guidelines for how inhabited spaces were to be treated and commemorated when and after they were abandoned may be better candidates for the Aceramic Neolithic artefactual deposition and the observed sequences within their histories⁴⁵. Depositional practices that involve the depletion of assemblages from the interior of houses has also been noted as a characteristic of the PPNA continuing into the PPNB, in the Levant and Anatolia, in contrast to the earlier Natufian sites (Kuijt and Goring-Morris 2002: 373, Watkins 1989). This may well be a cultural trait that early settlers in Cyprus assimilated and retained for a long time after the initial settlement on the island.

Of course, a lot more work is required to further substantiate the above argument since we do not have contextual information for other kind of 'objects' such as lithics, micro artefacts, or animal bone. Microstratigraphic analysis of the plaster floors would have been of great advantage. Matthews, for example, was able to differentiate between domestic and ritual areas at Çatal Hüyük, on the basis of the floor and wall plaster finishes (Matthews 1996, 2005a). At the same site, analysis of density variation in the distribution of micro artefacts, in relation to discard- producing behaviour in specific areas within the house and to midden areas outside, has been used to argue for the significance of the observed repetitive practices for the creation of social memories in the past; the choice of different plaster and the location of segregated activities for different parts of the floor, for instance near the hearth, or the cleaner areas of representational art and burials (Hodder and Cessford 2004⁴⁶).

⁴⁵ The later sites of Khirokitia and Rizokarpaso-*Cape Andreas Kastros* have also produced evidence for similar practices. Full publication of the artefactual assemblages at Khirokitia from the most recent excavations by Le Brun and the final publication from Parekklisha- *Shillourokambos* which is contemporary with Tenta will enable inter site comparisons.

⁴⁶ Their work has largely concentrated on comparisons between the 'shrine' and 'house' areas that Mellaart postulated and although they differentiate between 'clean' and 'cleaner' areas the focus is clearly on the 'cleaner' (of symbolic significance) areas.

Further evidence that can also be taken to denote **discontinuous** practices at *Tenta* includes the horizontal displacement of buildings, which is illustrated by the move from the 'lower south slope' to the 'top of site' area in later periods and from within limits of the outer settlement wall to the southern and eastern areas beyond its circumference. In the processes of 'moving house' it is interesting to consider how the temporal relationship between interior and exterior space changes. It is in these instances that we may suggest examples of specific events or single actions of short term commemoration, that is, of **intentional** practices that connect past and present by acknowledging the position of earlier acts; though the intentionality cannot be taken as proven. Examples include the sequence of events that took place outside S10 (Todd 1987: figs 29) and S99 (Todd 1987: figs. 37b, 44C). A semicircular slot or channel located in the western side of structure 10, but predating its erection, was subsequently cut by a shallow pit that contained an infant burial (Moyer in Todd 2005: 11). The body was accompanied by a limestone cobble and a fragment of painted plaster (Burial 7). The burial might be associated with an early phase of structure 10 or with another building predating it, since it was contiguous to its western outer wall. In the succeeding phase, contemporary with or immediately after the structure's abandonment, an ashy deposit belonging to an external hearth area was located partly above the previous burial. Whether the connection between hearth and burial was part of a ritual associated with the construction of the building, or it is entirely coincidental, cannot be known for certain. Similar associations between these features have, however, been known in the Levant, for example PPNA Mureybet (III) where a disarticulated skeleton (skull and long bones) was buried under a hearth (Verhoeven 2004: 246). They are also widely documented at the later site of Khirokitia where their accompanying mortuary rites in this case take place inside the house (Dikaios 1953, Le Brun *et al* 1989, 1994). When structure 10 lay abandoned at the end of period 4 and buildings began to be located in the upper slopes of the hill there is no evidence for 'remembering' the position of the grave, on the basis at least of the mixed accumulated deposits above these areas, which is the case for all extra mural burials at *Tenta*.

A second example that shows the relationship between interior and exterior space as new houses are being built and others are abandoned comes from a midden area prior to the construction of structure 99. Similar midden deposits containing animal bone, ash and other domestic refuse are found in extra mural locations at *Tenta*; in discrete locations in the narrow passages outside the structures. The only 'unusual' aspect of this midden was the

occurrence of a disarticulated skeleton without a grave pit. The body belonged to an infant and was found amongst many burnt lithics and burnt animal bone. Some of the animal bone was articulated. Structure 99, which is very poorly preserved and we do not have any further details about its occupation phases, was founded directly above the midden burial. The remains of articulated animal skeletons mixed with human bones are also reported in connection with ritual behaviour in the PPNB Levant (Verhoeven 2002, 2004) as well as in Cyprus in the case of the midden burials deposited in the Kissonerga-Mylothkia wells (Peltenburg *et al* 2003). Again the specific sequence of events cannot be known with certainty, for example whether this deposit represents a foundation rite that involved feasting and burning immediately before the erection of the house or whether they are independent events, chronologically separated. In either case this is another example of specific actions of commemoration associated with the house.

The creation of explicit house ancestry and **historical reference** producing long-term cultural memory is best illustrated at *Tenta*, in the case of the architectural complex that in its final phase had two concentric walls enclosing a small building (S14) as well as containing within its boundaries the underlying remains of two successive structures (S36 and 17). The excavator notes its 'special significance' but beyond that, he is reluctant to make a connection with specific symbolic or other functions of the building. More recently, Peltenburg (2004) has drawn parallels between the CRB (circular radial building) type in the Levant at PPN sites like PPNA Mureybet and Jerf el Ahmar and PPNB Munhata (Byrd 1994, Aurenche 1981, Stordeur *et al* 2000) and he suggested that these public buildings, architectural varieties of which the settlers brought to the island, including complex 14 at *Tenta*, might have been used for grain storage at a time of agricultural intensification. The lack of evidence for social inequalities at this stage, as evident from the small homogenous settlement plan at *Tenta*, points to an egalitarian society, whilst the central building might be taken to represent a communal public building rather than the expression of institutionalised authority. As is well known, the retention of the curvilinear house plan in addition to the circular radial building is a characteristic of the Late Aceramic period, long after the initial island colonisation and when social organisation and architectural form on the mainland had moved in a different direction (Bar-Yosef 2001a, b, Banning 2003). This could be explained as a retention of an ideology that referenced earlier times and according to Peltenburg could have originated in 'the initial shock of colonisation, a process of altering space and time' and in a period when stability in the new environment was sought in

familiar architectural forms (Peltenburg 2004: 84). Following this line of argument, the form and perhaps function of the architectural complex is an explicit instance of long term cultural memory, but one that was based on spatial rather than temporal depth, at least in the early phases of the Early Aceramic periods (Helms 1988, Gosden 1994); that is, associated with 'migrant belongings' rather than historical references (Fortier 2000).

While this mechanism of transmission is entirely possible and widely documented, one issue that we are overlooking in attempting to 'read' this public building 'horizontally' on the basis of its spatial form and function is that the importance attached to this particular place might also have its 'roots' in its vertical depth (Altman and Low 1992). The multiple sequences of actions by many generations that took place in exactly the same location (succession of three, possibly four buildings) will have deepened its history and would have created many temporal and spatial references. In other words, what we see in its final 'finished form'- two stone concentric walls, buttresses, gateways etc.- seems to display parallels with the mainland, however it might have been a visual reference to the community's past history in that specific place; perceived and talked about in terms of the building's ancestry, its named or distant ancestors, past ritual events etc. as opposed to its architectural characteristics. Consequently, acknowledging local origins it would have thus lost its more specific associations with the mainland as a result of imperfect transmission through oral narrative and infrequent rituals (Whitehouse 1994). Instead, it would have been established at some point as a local 'origin house'. Origin houses are widely documented in the ethnographic record, for example the Maori meeting houses, the kivas in Pueblo architecture⁴⁷ or the Polynesian 'holy houses'. Although they are chronologically and geographically distant from Cyprus they remain informative. In the case of the Polynesian 'holy houses', it is interesting to note that, as has been suggested, there appears to be no morphological distinction between house and temple (Kirch 2000). Although formal rituals and meetings take place in these buildings, hence they have specialised installations, they resemble houses. Similarly Bradley has used a wealth of archaeological and anthropological examples to demonstrate the overlapping of domestic/private and 'special'/public architecture, in relation especially to elite buildings (Bradley 2005). Kirch (2000) shows how this transformation from house to temple is temporal, associated with the 'ageing' of the house, rather than a solely formal process; which has been demonstrated in

⁴⁷ See Stordeur *et al* 2000, for similar suggestions in connection with the function of the public building at Jerf el Ahmar.

the same area archaeologically. Given the *Tenta* corridor building's architectural 'origins' and taking into account the communal ethos (Peltenburg 2004), we can suggest a public function that acknowledges the community's local origins, akin to a community's clan or lineage house that carries the social memories of the group rather than named individuals; a practice that is documented in a more fragmented manner in the later site of Khirokitia as it will be discussed later.

6.4.2 Memory and *place* at *Vrysi*

House replacement strategies provide evidence for **continuous practices** at *Vrysi*, involving vertical superimposition resulting in the impractical stacking of buildings within the subterranean hollows dug out from the marl headland to provide habitation space. The reasons for such choice of configuration are not known but it did create houses that by the Late Phase had an ancestry of over 10 generations of inhabitants on the same location. The site, based on radiocarbon determinations was, however, short lived. It was abandoned and relocated after only 200-300 years of occupation; a recurrent theme in Cypriot archaeology. It remains the case, nevertheless, that while in archaeological convention a three century occupation span is considered a 'short-lived' site, in terms of generational or 'lived' time this span would have included multiple temporal cycles such as: the birth and socialisation of children into the pre-existing routines and traditions; the maturation stages of adults establishing new households and acquiring social roles in the community; the aging and death of older inhabitants and the restructuring of family relations. Given that all these life stages find expression in the architectural record as numerous ethnographic examples demonstrate (e.g. Carsten and Hugh-Jones 1995a, b, Waterson 1990, Bloch and Parry 1982, Goody 1958a, Lane 1994, Yanagisako 1979) the patterns of house replacement that are observed at *Vrysi* could be placed within similar temporal frameworks. The depth and relative clarity of the stratigraphy at *Vrysi* and the state of preservation of the architecture and their contents facilitates such an attempt. In particular, several points arise from the analysis of episodes and their artefactual associations at *Vrysi* that need to be further addressed within a wider interpretative framework. The precise **repetition** of spatial arrangements; the **variability** and **changes** in the configuration of fixtures observed between some floor horizons; the circumstances of object deposition and house replacement; the **displacement** of houses to the South sector are all such sequences that show the relation between past and present.

The stacking of buildings and the repetition, alteration, or demolition of earlier arrangements in successive floors stress that we are explicitly dealing with 'space as a vertical construct' (D. Bailey 1990), not just in terms of its archaeological signature but in terms of how it was understood and incorporated into the *schemas* of successive generations. Of course, in order to assume such connections we have to be prepared to attribute a secondary role to purely functional and ecological explanations of spatial configuration. Undoubtedly, the occurrence of floods and mud wash that would have quickly accumulated at such depths would have to be dealt with by the inhabitants on a regular basis. This would particularly affect the open spaces, which at Vrysi are in the form of very narrow passages between the houses. Although drainage gullies were located in both passages, the stratigraphy shows that the passageways were filled with roof wash and domestic refuse that, if left there, would block the entrances to the houses. As no measures were taken to dispose of the wash and rubbish the solution would be to raise the floor levels and built new walls above the earlier ones (Peltenburg 1982: 103). However, refuse disposal and community maintenance in prehistory do not have to adhere to Western views of cleanliness (Douglas 1966, Moore 1982) and although practical reasons cannot be excluded these could be seen as part of generational cycles.

For example, episodes of renovation where the floors, entrance threshold and often the hearth are raised above the previous occupation surface without major rebuilding of the walls, may be associated with new stages in the household or generational cycle rather than solely with maintenance. According to the phasing system at Vrysi and the absolute chronology, each phase lasts for about 100 years; the time over which three or four generations inhabit the same enclosed space. Thus we see such renovations taking place every two or so generations. It goes without saying that a fine enough resolution and a neat sequence that would allow us to be accurate, in the sense that anthropologists can be, about such suggestions are lacking, not just in the excavation of Vrysi but in the long-term scale within which archaeology as a discipline functions. Nevertheless, there is a degree of regularity, a cyclicity, in the manner that these re-surfacings occur to support a link with the temporalities and repetition of life stages and the ritual practices that are essential in marking and legitimising these crossings (Van Gennep 1960).

The timing of the more drastic and energy consuming practice of house replacement by deliberate demolition of the upper walls, then re-building of the house on the stubs of their predecessors, might have been dictated by different circumstances from

the episodes of renovations; that is apart from having to deal with natural decay and the need to maintain unstable walls. However, partial rebuilds and wall renovations are noted, for example, in House 1 (fl4b) and a series of renovations in the masonry of House 5. Also collapsed walls would have to be replaced or strengthened as evident in the case of House 6. But, as noted above, in some buildings the demolition of the upper walls was more intentional creating the distinctive packed fills of pisé and rubble and might not have been one that was driven by anticipated structural collapse or natural decay. Peltenburg (2003) in a recent article cites the occurrence of such deposits in three floors (H1, floor 4a, H2B, floor 4a-b, H6, floor 2) and suggests that these represent deliberate efforts on the part of the 'families' concerned to seal the traces of previous occupations before habitation on the same location resumes. He postulates that this practice might have followed an important event such as the death of the household head (Peltenburg 2003: 113); as has been argued for the European Neolithic (Tringham 1991, Chapman 1999). In other words, they are *abandonment or renewal rituals* of a similar kind to the ritual closures of dwellings that have been identified in the ethnographic and archaeological record (Stevanovic 1997, Walker 1999, Walker and Lucero 2000, Lightfoot 1993, T. Gibson 1995). Peltenburg bases his argument on the occurrence of complete, usable objects on these three abandonment floors and the absence of evidence for subsequent scavenging or efforts to retrieve these objects at a later date. The results of the present analysis supports Peltenburg's insights into termination rituals and some further examples have been tentatively identified on the grounds of the stratigraphic information available in the publication (tables 24-25, figs. 6, 9-10).

These practices could be associated with the death of an important occupant or other events. Ritual abandonment that is triggered by the death of the household head, as Peltenburg suggests for Vrysi, is the most frequently cited example that explains the incorporation of almost complete household inventories in abandoned contexts (Tringham 1991, Walker and Lucero 2000). However, no human burials were found at Vrysi in these contexts and besides some evidence of limited burning in House 2B, these buildings were not destroyed by fire. The destruction of a house following the death of an occupant apart from a symbolic commemorative act is also a way of forgetting the dead and of 'casting out death' (Lane 2003: 26). This is expressed in excluding his or her possessions and everything that was used in the household from usage in the daily activities of the living. At Vrysi, as noted the abandoned artefacts cannot represent complete inventories as some objects are either over or under represented. Hence, Vrysi closure episodes do not satisfy all the criteria

for death ceremonies as has been argued by Tringham for the European Neolithic or the pre-requisites that Walker and Lucero (2000) have set to infer ritual destruction. We have no evidence for mortuary practices at Vrysi inside the domestic structures or outside in the excavated exposure to compare these behaviours. This, however, should not detract us from the matter of **intentionality** of closure and house replacement at Vrysi and the suggestion that abandonment and collapse or abandonment and renovation were two successive but separate episodes in the life of a house. The ethnographic literature is rich regarding examples of deliberate abandonment and ritual house destruction and they do not all concern the death of a household head or the total destruction of a house. For example, Carsten (1997: 57-81) notes that new buildings in Malaysia are built when children are born, while similarly in other societies life stage rituals that are reflected in the architectural life cycle of the house include pregnancy, birth, marriage, or the move away from the parental house (T. Gibson 1995). Also, in many societies, such as the Anasazi, ritual destruction involves only the burning or dismantling of the roof while the sealed contents might or might not contain human remains (Wilhusen 1986). LaMotta and Schiffer (1999: 23) list examples of intentional destruction upon the death of an occupant where only broken or unusable objects are burned. Clearly, with such diversity and taking into account the cultural subjectivity of these practices, we cannot rely on strict criteria and checklists to identify universal commemorative behaviour in the archaeological record.

In isolating two distinct episodes (renovation and closure) from certain houses on stratigraphic grounds and studying the association between artefact classes from these two episodes, some differences are noted; although some are marginal. Renovation episodes yielded more containers than closure episodes (figs. 9-10) and this is further supported when comparing the assemblage of both with House 1 that collapsed suddenly (Peltenburg 2003). A useful piece of supporting evidence would be the refit sequences of pottery for which we do not have information (*cf* Montgomery 1993). The remaining classes of objects have only marginal differences: more ornaments and more adzes/axes/chisels were noted in renovation episodes than closure and more needles and pottery discs in the latter. What we can tentatively say with this limited evidence is that these two episodes might represent snapshots of two different events that are associated with quite different *rites of passage*. For example, in some societies when a person dies nothing that is in the house can be consumed while food can only be prepared outside until the funeral has taken place (Carsten 1997: 124). Perhaps similar events might explain the absence of complete or near complete

containers, as part of funerary rites, in the closure episodes at Vrysi and the sealing of the hearth with clay that was noted in H2B; although these are only suggestions and the Malay house remains far too distant, geographically and chronologically.

It is worth repeating that not all houses show the same sequence and not all houses produced evidence for deliberate destruction or for renovation that was accompanied by the sealing of complete objects. This is partly explained by the fact that excavation always reveal snapshots of the last preserved stage rather than the complete history of a building. But also this, along with the observation above that more variability is noted in the later phases in terms of repeating the layout of previous floors, might also reflect the lack of a formal integrative system i.e. a suprahousehold institution that regulates intra generational transmission which would have produced regular and invariant behaviour; thus creating a common social memory. This may be observed in the South (younger) sector where more variability and **innovation** (more 'repeated/altered' replication types) was noted. In other words, the mnemonic practices identified thus far at Vrysi might have been more infrequent, variable and open to individual families' events, choices and interpretations. The biographies of the houses and their associations with the included or excluded objects they seal created the main narratives of an informal memory of place and identity and they were open to re-interpretation and negotiation by succeeding generations.

Chapter Seven

Case-Studies II

Housing Memory and Ancestry in the Chalcolithic and Early-Middle Bronze Age

7.1 Kissonerga-Mosphilia: Settlement Layout and History of Research

Kissonerga-Mosphilia (henceforth *Mosphilia*) is a multi-phase settlement that dates for the most part to the Chalcolithic period. Mosphilia is located in the Ktima Lowlands area of the Paphos district, 6 km north of the modern town of Paphos, on the south western coastal plain of the island, approximately 500 m from the present coastline (fig. 56). The site was excavated between 1982 and 1989 by an Edinburgh University team, directed by E. Peltenburg, following intensive survey of the area in 1976 and trial excavations in 1979. The site had been located by Hadjisavvas' survey project in 1977 (Hadjisavvas 1977). The excavations at *Mosphilia* were part of a multi-site project (Lemba Archaeological Project) with the underlying aim to examine prehistoric sites in western Cyprus, which until that time was regarded as too remote from the archaeologically rich sites in the north and the south central parts of the island (Peltenburg 1979, 1982a). As with the case of the Vasilikos Valley Project in the south central part of the island, a multi site programme was implemented that included the excavation of three sites in the Ktima Lowlands area, Kissonerga-Mosphilia, Kissonerga-Mylothkia and Lemba-Lakkous as well as a more extensive survey programme of western Cyprus (Bolger, Peltenburg and McCartney 2000). This strategy of multiple site investigations was considered as important in the context of the lack of stratified tell sites on the island compensating for the chronologically incomplete picture that single period sites yielded. Peltenburg, for example, notes that this would give us 'an all too fragmentary glimpse of a complex situation in which, for reasons unknown communities shifted periodically...' (Peltenburg 1985:1). The underlying research agenda of the project was to understand the nature of social change and the factors that accounted for the discontinuities and gaps between different areas on the island and between preceding

and succeeding periods. It was recognised that to achieve the aims of the project a more detailed method was required, with stratigraphic controls, radiocarbon dating and meticulous analysis of pottery. The final report of the excavations at *Mosphilia* appeared in 1998 (Peltenburg *et al* 1998) and unlike the earlier publication of *Lemba-Lakkous*, an explicit contextual approach was adopted where site formation processes were given much more attention and as a result, ceramic typologies, information about other artefact categories and stratigraphic associations are presented in a much more detailed manner.

Kissonerga is one of the largest sites in the early prehistoric record of Cyprus with an estimated area of 12 ha and an unusually long period of occupation of approximately 3,600 years (table 16). While such a long utilisation of the same locale is probably meaningful and in some respect, indicative of the importance attached to the place, it is also slightly deceptive, since the sequence was interrupted at least twice over that long period. With regard to the large extent of the site, it has to be noted that this, too, can be misleading. As noted earlier, we are dealing with flat sites where, unlike the deeply stratified *tells* in other areas of the Eastern Mediterranean, successive occupation that covers the entire life-span of a settlement is a rarity. However, an additional contributing factor, here, is the topography of the site which, lacking any obvious built or natural boundaries, provides the settlers with ample space for expansion; horizontally rather than vertically. The causes or effects of such decisions with regard to constructions of 'histories' in the past will be examined later, but in terms of discerning archaeological 'horizons' and contemporary generations of houses across the entire area, this poses serious problems⁴⁸.

The excavations concentrated on two zones, a 'Main Area' and an 'Upper Terrace' with a total exposure of 1,358m². Thus, only glimpses of the spatial configuration and the use of the landscape can be caught, especially if one takes into account that only a fraction of the estimated total extent (12 ha) of the site has been unearthed. Thirty eight buildings have been excavated in the Main Area dating from periods 3A-4. Only half of these have been unearthed in a substantial enough horizontal exposure, whilst the remainder are suggested by their incomplete wall arcs the preservation of which varies (table 27, fig. 65). In the Upper Terrace four buildings dating to period 3A have been exposed. A further three possibly timber framed buildings of the preceding period 2 are suggested by their internal plaster surfaces and contents (table 27, fig. 64). The preservation of the architecture is rather

⁴⁸ The shortcomings in connection to longevity, occupational continuity and extent and nature of intra-settlement drift at *Mosphilia* have been noted by Peltenburg (1991: 20).

poor as substantial erosion has been documented. In addition, modern disturbance caused by ploughing and terracing has truncated and obliterated a substantial proportion of the architectural evidence. The excavator notes the difficulties of discerning stratigraphic interfaces in the loose, grey soils. This was exacerbated by poor measures taken in Chalcolithic times to deal with rapidly settling erosion and to consolidate exterior spaces which is more pronounced in the Main Area and especially in period 4 (Peltenburg in Peltenburg *et al* 1998: 3, Peltenburg 1991a: 19). Despite the poor soil conditions at the site, several sizeable circular buildings were recovered and in many cases vertical excavation was complete or near complete which facilitates tracing the life courses of houses at *Mosphilia*. Moreover, the site has produced rich architectural and contextual evidence which has generated several interpretations with regard to social organisation and settlement layout, in particular about the relationship between open/public and private/household space; as well as about mortuary ritual practices, communal ceremonies, gender constructs; and more importantly, for the purposes of the present research, about the close link between architectural histories and life events (Peltenburg 1988, 1989, 1990, 1992, 1993, 2002, Bolger 1992, 1994, 1996, G. Thomas 2005, Goring 1988, 1991).

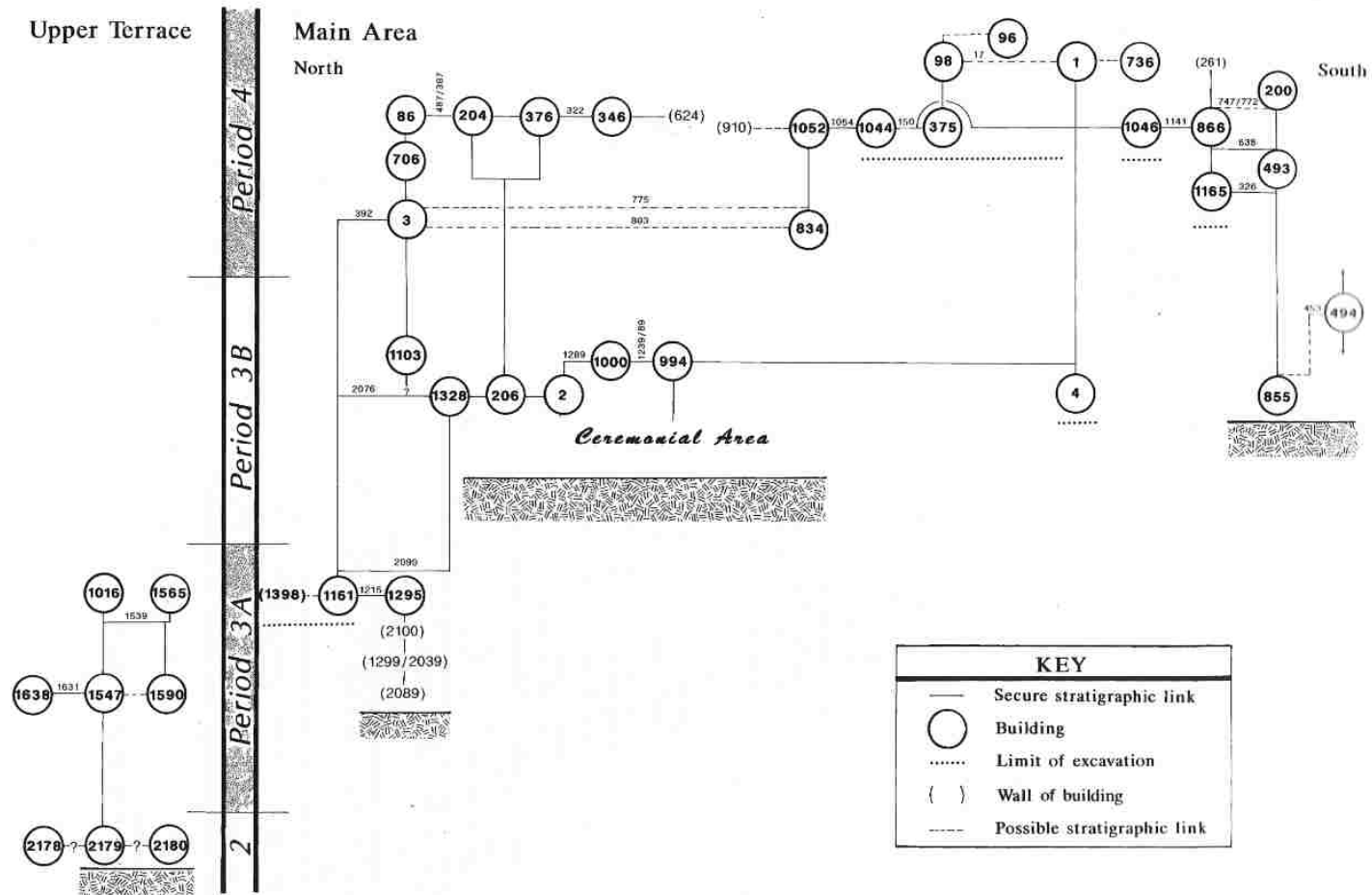


Figure 12. Schematic representation of house replacement: Kissonerga-Mosphilia.

7.1.1 Replication Types and House Ancestry (tables 7, 26-28, figs. 12, 64, 65)

Period	Area	Founder	Displaced	Continued	Repeated	Enclosed	Total
2	Upper	3					3
3A	Upper		(2)	3	1		6
3A	Main		(3)	3			6
3B	Main		4 (+2)	2		(1)	9
4	Main		1 (+4)	5 (+3)		6	19

Table 7 Replication Types at Kissonerga-*Mosphilia*

Note that numbers in brackets represent uncertain stratigraphic relationships with earlier deposits or buildings that were limited excavated. See table 26 (types with small letters e.g. f, r, etc)

The excavations at *Mosphilia* have yielded a series of radiocarbon determinations and together with stratigraphic analysis and the relative chronology provided by pottery seriation, the excavators were able to discern seven discrete phases⁴⁹ (see table 16 for calibrated dates). As a consequence of the preservation factors mentioned above, the internal phasing of the sites describes discrete episodes of building activity in specific areas, based on a series of superimposed structures, rather than site-wide building horizons. Each phase thus includes multiple episodes of renovations and re-buildings as well as shorter scale events. The two areas (Main Area and, ca. 50m to its NW, Upper Terrace) are chronologically linked only on the grounds of ceramic seriation. Despite chronological and preservation issues, an extensive sample of architecture and negative features from all periods, though not temporally continuous, along with the internal phasing of the site, gives us an idea of how and where the landscape was occupied, abandoned, re-occupied or ignored; at least in the areas exposed by excavation, assuming that they are representative of the utilisation of space on the site (fig. 12).

Period 1A-1B dated to the Neolithic is scantily represented by a few pits and derived sherd scatters, and is therefore not included in this account. Period 2 (Early Chalcolithic) occupation was located only in the Upper Terrace and although the timber framed architecture is not very well preserved, it provides important clues about temporal and locational continuity since it is found stratified below period 3A stone buildings. At this stage (period 3A-early Middle Chalcolithic) the Main Area was built up, though not for the first time, since 3A buildings were founded into Early Chalcolithic erosion deposits

⁴⁹ Note that phases are called periods in the site report.

(Peltenburg 1998: 23). The succeeding period 3B (mid/late Middle Chalcolithic) occupation marks possibly a complete displacement southwards into the Main Area, since no architecture was revealed in the Upper Terrace. Some superimposed buildings confirm continuity between periods 3A and 3B but generally speaking the area was filled with newly erected buildings in previously empty spaces. This period contains the best preserved architecture and evidence for an organised settlement layout and communal works (Peltenburg in Peltenburg *et al* 1998: 244-49). Between the end of Period 3B and the foundation of buildings in the Main Area during Period 4 (Late Chalcolithic), there appears to be a *hiatus* in occupation (Bolger in Peltenburg *et al* 1998; Peltenburg *et al* 1998: 249). Several structures, including one of the largest Chalcolithic buildings, the so called 'Pithos House' (B3), were positioned above period 3B dwellings which shows that the builders were aware or became aware of earlier occupation on the location, despite the chronological gap of two centuries (Peltenburg *et al* 1998: 249). Traces of utilisation of the site during the Philia facies were excavated at *Mosphilia* (period 5); one of the very few settlements to have yielded an uninterrupted sequence from the Late Chalcolithic to Philia (Webb and Frankel 1999). Archaeological evidence for Period 5 occupation, however, has been severely affected by terracing and erosion and upstanding architecture is not preserved.

The replication patterns that are identified on the site are variable and not one type or method of house replacement dominates the, admittedly, limited and poorly preserved sample in a particular period or area (table 7). Keeping in mind the topography of the landscape and the nature of occupation, there is a considerable degree of continuity in the form of overlapping and enclosed walls between successive buildings' plans (figs. 64-5). This is more apparent in the overlap of the buildings' positions between period 3B and the succeeding period 4 in the Main Area. Most buildings, therefore, belong to varieties of the '**continued**' replication type.

In order to understand the strategies of house replacement and the effects on the perception of continuity or break that these would have had on the community, we need to explore the growth of the village layout, in conjunction with the duration of each period. The former takes the form of possibly synchronous intra-site horizontal shift. Neither task is easy though, due to the restricted excavated area that does not allow us to trace the direction and reasons for settlement shift. Similarly, although isolated buildings' sequences provided the basis for the site's phasing, the longevity of each period (and, therefore, the

frequency of displacement) cannot be easily deducted in calendar or 'generational' years⁵⁰. For example, the period 3A expansion southwards, to the Main Area (or the contemporaneity of the two areas), cannot be determined from the radiocarbon determinations, since all the dates concern occupation in the Upper Terrace (table 16).

In summary, apart from the 'continued' type with overlapping walls of different periods mentioned above, several '**displaced**' buildings exist, mainly dated to period 3B, at which time the settlement focus was relocated in the Main Area. Following the end of the short-lived period 3B occupation which lasted approximately 200 years, the locality was abandoned, probably as a result of another (undiscovered) relocation. The succeeding period 4 re-occupation, two centuries later, is characterised by both 'continued' and 'displaced' houses. It is not clear whether the builders were aware of the positions of the previous buildings. More importantly we cannot be certain that they would have been aware of the social and kin relations that were associated with these earlier buildings or with the ritual performances that had taken place in and around the area of buildings 206, 2 and 4 ('Ceremonial Area', Peltenburg *et al* 1991). In any case, period 4 dwellings generally respected the positions of earlier buildings, with a few exceptions where their walls overlapped earlier wall arcs (e.g. B3, B736). No buildings were placed over the 'Ceremonial Area' (but a number of period 4 graves were located in its vicinity). Mention should also be made of '**enclosed**' type buildings from period 4 in the Main Area since these possibly illustrate direct observation of the alignment of the earlier buildings, rather than random placement. For example buildings 493 and 200 form, with underlying period 3B building 855, a series of nested houses; the last in the sequence (B200) being the smallest. 'Enclosed' type buildings are more common in period 4 sub-phases (e.g. B3 and B86, B493 and B200, but also period 3B buildings 206 and wall 148), indicating a closer relationship between successive generations, perhaps along kinship lines and inheritance rights (Peltenburg 2002). In addition, since 'enclosed' buildings are the closest alternatives to 'repeated' types, a replication strategy that is not practiced at *Mosphilia*, then they are the only structures that may be taken to represent a double generation, outliving all other buildings in their respective generations (period 3B for B2 and B855, period 4 for the 'Pithos House').

⁵⁰ Although the Lemba Archaeological Project had a clear strategy with respect to the collection of multiple samples for radiometric dating, particularly from EChal/MChal contexts. Bolger, Manning and Peltenburg (in Peltenburg *et al* 1998: 14-21) have discussed the sample recovery limitations at *Mosphilia* and they have highlighted the problems associated with collecting multiple dates for single periods and buildings from different episodes (e.g. construction, use, destruction).

7.1.2 Overview of Episodes: Continuity and Discontinuity (tables 26-27, Appendix D)

Evidence for upstanding architecture was documented from periods 3A, 3B and 4, whilst the earlier period 2 architectural remains are too poorly preserved to allow any reconstruction of their sequences. Period 5 occupation, as noted, did not produce any evidence for domestic architecture in the form of walled spaces at least.

Construction

The earliest architectural evidence dated to the Early Chalcolithic, period 2 at *Mosphilia*, consists of lightly built post huts, sunk in shallow hollows with poorly preserved plaster surfaces. The buildings lacked internal partitions or fixtures but bell-shaped storage pits were found in close proximity (e.g. B2178) which Peltenburg interprets as communal grain storage facilities serving a number of buildings (Peltenburg *et al* 1998: 241). The solidly built structures of the succeeding Middle Chalcolithic (*Mosphilia* period 3) with mud wall set on stone foundations possess a wealth of internal fixtures, the most elaborate of which are the centrally placed platform hearths as well as the partitioning of the floor area by means of low mud ridges. It is at this stage that the 'typical' Chalcolithic house is formalised and replicated exhibiting remarkable similarities in the use and construction of space (Peltenburg *et al* 1998: 237-41, Thomas 2005). Entrances are normally located in the southwest with doorways, set on pivot stones, opening inwards.

Evidence for an increasing concern of communities with materiality and visual impact of their buildings comes from a group of circular buildings in the Main Area (period 3B). Their conspicuously large sizes (e.g. B206 had an internal area of 132.7 m²) and quality of construction set them apart from other contemporary as well as preceding and succeeding buildings on the site. Amongst their characteristics was the use of thick lime plaster for their flooring with occasional evidence for red-painted segments (e.g. B206, floor 1), partition walls, large rectangular platform hearths at their centre and calcarenite walls. Their central position and association with an open area reserved for public ceremonies point to their symbolic importance within the community (Peltenburg *et al* 1991). Smaller, rectilinear buildings, located in the northern part of the excavated area co-existed with larger circular structures in the southern most part, revealing a distinctly segmented settlement layout (Peltenburg 1991a, 1996), where visual statements in terms of construction, materials and form would have been effectively projected.

Period 4 architectural development includes the construction of the Pithos House (B3) one of the largest Late Chalcolithic building (with an internal floor area of 48.4m²) that contained numerous Pithoi, with a combined storage capacity which would have been approximately 4,000m³, a large number of axes in discrete caches, evidence for olive processing, metal working and redistribution; inferred from the occurrence of conical stones (Peltenburg *et al* 1998: 37-43). Nevertheless, this was an exceptional building, which was not repeated in other structures. Building techniques and materials, as represented in period 4b clusters of small buildings, lacked the architectural elaboration of period 3A and 3B and a number of characteristics that typified Middle Chalcolithic buildings, such as lime plaster floors and rectangular platform hearths had by now disappeared.

Accumulation

Houses are a powerful and durable means of conveying information about cultural and social traditions (Rapoport 1982). Consequently, documented changes such as those discussed above with regard to their construction materials and replication patterns are likely to have reflected 'disruptions' in the social reproduction and transmission of social messages as well as cosmological beliefs. As Fletcher (1984) states, the replacement of architectural units with novel architectural expressions will have resulted in, or been triggered by, the decaying of the 'spatial message'. A few observations about their 'living' stages therefore must take into account the social groups inhabiting these spaces. In the case of the multi-phase settlement of *Mosphilia* and in the absence of extensive horizontal (contemporary) exposures, this affords a view that considers the dynamics of the changing physical and social houses over the long-term, albeit with caution. In this way, the shorter scale 'events' associated with episodes of renovation, destruction and replacement discussed below are placed in their wider social context.

Early Chalcolithic occupation, as noted, is too poorly preserved to make any inferences about the relationship between floor area and domestic groups. On account of their ephemeral construction, Peltenburg postulates that this phase might represent less permanent occupation on the site (Peltenburg 1991a: 21). But the occurrence of large storage pits outside a group of buildings in the Upper Terrace suggests delayed return agricultural systems; associated with sedentary populations.

More information is available from the Middle Chalcolithic period that is represented at *Mosphilia* in periods 3A and 3B. Pairs of buildings in the Upper Terrace with

an average roofed area of c. 21m² suggest that during period 3A these could have been the residences of families of three to four individuals (using Kolb's figure). Considerably smaller rectilinear structures in the Main Area are more difficult to interpret, since they appear to be freestanding in the northernmost extent of the excavation, hence we do not know whether they were attached to larger buildings serving more specialised functions. Roofed space was equally variable in the succeeding period 3B. Taking a rough average of 56 m² as most representative⁵¹, between five and nine people could have occupied the dwellings (depending upon whether we use Narrol's or Kolb's figures, see chapter 6 for discussion). It is likely that the dwellings were arranged now in a 'compound' manner, also known to have existed at nearby Lemba-Lakkous, period 2 (Peltenburg *et al* 1985). Only one such possible spatial arrangement is at the moment represented by buildings 206, 2, 1000 and 4, which dominate the central, or 'high sector,' of the Main Area. Peltenburg has argued that the settlement layout points to a hierarchical plan whereby the impressive calcarenite buildings in the high sector contrast with those further south, in the 'Stream Sector'; the latter physically separated from the high sector by a ditch while, similarly, the northern part of the Main Area was separated from the central group of buildings by a paved track (Peltenburg 1991a, *ibid* in Peltenburg *et al* 1998: 244-5). These boundaries are regarded by the excavator as 'distancing measures' (Peltenburg 2002) whilst the composition of these domestic groups are envisaged as 'weakly articulated corporate groups'; an argument which leads into accepting the existence of emerging elites at *Mosphilia*, who had the means to display and impose their high status by hosting feasts⁵² and leading public rituals (Peltenburg *et al* 1991, Peltenburg 1988).

Although the above interpretation is a possibility, the reality is that we do not have sufficient comparative evidence to postulate the existence of such a rigid hierarchical social structure and status inequalities. We might, for example, wish to keep in mind that whilst the central group of calcarenite buildings has been fully exposed, the same cannot be said for the northern and southern parts of the Main Area, which have yielded only one partially excavated building each. These issues will be discussed later in the chapter, but it is suffice

⁵¹ Excluding the outsized building 206 with an area of 132m² and the smallest structure B1000 that had a roofed area of only 12.6m², both of which might not represent 'typical' dwellings (table 27).

⁵² Based on the evidence of a large number of distinctly painted pottery vessels for food and liquid serving as well as on the occurrence of several earth ovens in the open space adjacent to the buildings of the high sector.

to say that they cannot be resolved given our present state of knowledge (see Bolger 2005: 120-1, Held 1993: 28-9 for alternative scenarios).

More extensive evidence comes from the succeeding, but discontinuous, period 4 in the Main Area which points to different spatial arrangements. Unlike the differential size of the period 3 buildings, Late Chalcolithic dwellings were arranged in compounds comprising a number of small undifferentiated (in terms of size rather than function) buildings with an average floor space of approximately 11m²; possibly housing co-residential groups (Peltenburg *et al* 1998: 250). Similar arrangements are also known from a row of buildings at Lemba-Lakkous, period 3. The only exception to this norm at *Mosphilia* was the large 'Pithos House' (B3) which was founded earlier in the period 4 sequence (period 4a) and it was destroyed by the time of the establishment of the abovementioned compounds. Again, it is not clear whether the outsized Pithos House represents an administrative centre or a communal storehouse (Held 1993), or constitutes evidence for the emergence of aggrandisers who were in control of bulk storage (Peltenburg 1993).

Renovation

Moving back to shorter scale of events to consider the more subtle transformations that took place within individual houses' histories we note that although the dwellings were well maintained they rarely show evidence for extensive renovations in the form of multiple 'floor horizons' (tables 26-27⁵³). Most houses have one to three episodes of major renovations⁵⁴. It appears, based on the present evidence, that period 4 buildings undergo more resurfacings than buildings in preceding period 3. However, this might be because we have a bigger sample in period 4. There is limited evidence with regard to observing the continuity or re-arrangement of space between successive refurbishments, due to poor preservation. However, the hearth in most cases seems to remain a constant feature and its location is retained or it remains in use in the later floor. For example, although in B 1016 the second plaster surface sealed part of the original hearth, the latter remained in use as a smaller 'firebox'; perhaps an oven (Peltenburg *et al* 1998b: 31). In the same multi-phase building a number of other major and minor alterations also took place. The most

⁵³ Note that in table 27 occupation horizons are distinguished from minor renovations. The latter represent replasterings without major alterations to the house layout, whilst the former implies more radical changes, perhaps associated with different generations.

⁵⁴ Note that in keeping with the procedures applied total sites examined here, episodes of renovation refer to evidence for a 'new' occupation phase. I follow the excavator's interpretation of occupation phases as 'floors'.

characteristic alteration was the insertion of a pebble surface that raised the area of the eastern segment. This highlights the special attention given to the areas/rooms enclosed by partition walls or low ridges probably reserved for sleeping (Peltenburg *et al* 1998: 239), where plaster surfaces were kept clean, well maintained and smoothed over compared to the rest of the available space within the building. In another period 3B building (B1044) a new, larger hearth was built directly above the previous one following a refurbishment phase.

It is difficult to hypothesise on how frequently episodes of renovation would have taken place, since we do not know the exact duration of buildings or have a big enough sample to compare the 'fit' between refurbishments and generational cycles (as we were able to do very roughly at *Vrysi*). For example, the three successive floors/phases within the life of B1016 must have taken place in the space of less than 100-200 years, given that the building was erected late within the duration of period 3B, as it overlies an earlier structure (B1547) of the same period. On the other hand, the much longer-lived B3 (300-400 years⁵⁵) yielded evidence for only two floors; the second sealing the hearth of the previous floor and receiving numerous pot emplacements. Moreover, some of these occupational phases, in archaeological terminology, would have been associated with different circumstances; for example changes in the use of the buildings. B200, for instance, was the last building in a sequence of three superimposed structures, the last two within the short lived period 4B (c. 100 years). Yet, B200 had three phases/floors. These are thought to have been associated with different uses of the structure⁵⁶. Other information regarding continuity or discontinuity between phases of renovation concern the blocking of entrances with stones and relocating them in other parts of the building (e.g.B86)

Collapse/Destruction

There is great variability in the patterns of collapse and abandonment of buildings probably depending upon the circumstances that prompted their evacuation. Most structures had evidence for structural collapse and/or wall tumbles on their floors; subject to further collapse and gradual decay after they were abandoned. In some cases though there is evidence of planned, gradual abandonment. An example is B2 located in the perimeter of the open ceremonial area along with other buildings that carefully bounded the latter

⁵⁵ See Bolger *et al* in Peltenburg *et al* 1998: 20 for a discussion of the chronology and longevity of B3.

⁵⁶ The first floor horizon is interpreted as possibly an animal pen (Miles *et al* in Peltenburg *et al* 1998b: 13).

(Peltenburg *et al* 1991). The excavators note the unusual practice of removing, apart from the partition walls and objects both of which could have been re-cycled, the hearth and the door pivot and edge-set stones which are normally left behind (Peltenburg *et al*: 31). Building 86 was also abandoned and cleared out of objects prior to collapse. Its stone superstructure collapsed onto its latest floor. A suggestion was made that the pattern of its collapse might indicate deliberate demolition (Peltenburg *et al* 1998b: 11).

Other buildings retain evidence of extensive burning followed by collapse. B855 (period 3B) contained ashy fills mixed with collapsed structural materials sealing the artefact rich occupation deposits on its latest floor 'Pithos House' B3 (period 4) was also destroyed by conflagration preserving in its interior numerous artefacts, at least 37 large storage vessels and a number of installations, including a possible olive press. Evidence for the sequence of its collapse suggests that the roof fell in first followed by wall tumbles (Peltenburg *et al* 1998: 38). Its extraordinary contents and the sudden manner of its destruction, which included the body of a child trapped in the wall and roof collapse, have been the subject of thorough contextual analysis and interpretation of the social dominance of the building's occupants by Peltenburg (Peltenburg *et al* 1998, Peltenburg 1991a). Whether this building is to be interpreted as a communal storehouse acting as a redistributive centre for the community or as the residence of the head of a corporate group with access to accumulated wealth and control over productive labour, like Peltenburg argues, is not clear. However, in either scenario its importance gathered by the evidence of the way it was destroyed and its trapped contents points to its exceptional status. The possibility of a ritual closure similar to Late Neolithic traditions that we saw at *Vrysi*, either upon the death of the household head or triggered by another event has been suggested (Peltenburg *et al* 1998: 253). The contextual evidence and further considerations regarding the building's destruction circumstances will be considered below in 7.1.3. Of relevance here is to note that support for a deliberate rather than a sudden accidental conflagration is suggested by the stone arrangement that is likely (but not proven) to have been placed there with the purpose to block and seal the entrance area (Peltenburg *et al* 1998: 38). On the other hand the excavators consider the possibility that the fire might have been generated from the interior on the basis of experimental reconstruction. If the storage vessels contained olive oil that could be inferred from the occurrence of an olive press then they could account for the intensity of the conflagration. However, the contents of the Pithoi are

not known and it is possible that they were empty at the time of the fire. (Peltenburg *et al* 1998: 42-3).

House Replacement

Two pairs of successive buildings were located in the Upper Terrace, dated to period 3A. Buildings 1547 and smaller structure 1590 were succeeded by buildings 1016 and smaller B1565, slighting the walls of their predecessors. Of these, the former was constructed above and incorporated some of period 2 and early period 3A extra mural pits. Below the pitted area two earlier buildings (period 2) were located although they are poorly preserved and we do not know whether the builders of B1547 were aware of these rather flimsy timber structures or were more interested in including the earlier pits within the circumference of the new building. The latter scenario has been supported by the excavator, who notes that this behaviour might illustrate the new social organisation of period 3B, where storage areas become associated with individual households as opposed to the communally based extra mural location of storage in previous times (Peltenburg *et al* 1998: 242-3; Peltenburg 2002).

The pattern of replacement, between the successive pairs of buildings during period 3A, as was noted, was not entirely haphazard, although the alignment of the new houses was completely offset in comparison to the earlier structures. The latest pair, especially the larger and elaborate building 1016 was carefully placed in the space between the two earlier structures (B1547, 1590). There is no evidence for a significant chronological gap between the two pairs, since both were dated to period 3A. It is likely, however, that construction of the latest buildings did not follow immediately after the abandonment of the previous ones. Post abandonment deposits within B1547, with signs of re-use within its collapsed shell, artefact rich upper fills and graves cut into its western wall, show that the building remained open for some time after its abandonment, although we cannot know exactly for how long.

There is limited evidence for methods of superimposed house replacement within period 3B. The exception to this is the replacement of B2 by a poorly preserved structure the walls of which were placed inside and very close to the perimeter of the earlier building. Only a small arc is all that remains from this 'enclosed' type structure but its evidence is significant given the exceptional nature of B2 and the fact that very few buildings were replaced in the same (enclosed type) manner. So far I have taken the 'enclosed' type of replication to denote greater attention paid to positioning a new building rather than

'continued' or overlapping houses in which the evidence for intentional continuity instead of random placement is not always convincing. Hence, only three buildings follow the same alignment, albeit as a smaller version of their predecessors. One of these is building 86 that was constructed directly over the much larger Pithos House. The excavator notes the deliberate efforts on the part of the builders to place the structure in a way that its hearth overlaid the earlier one and its entrance retained the same orientation, although this meant that the new hearth would have to be off-centre (Peltenburg *et al* 1998: 44). Around the exterior perimeter of the building a rough cobbled surface was placed, filling the space between the new building and the earlier one and stabilising at the same time the collapsed debris of the abandoned Pithos House. The third and last example of 'enclosed' buildings comes from three superimposed houses (B 855, 493, 200), the first two following closely the wall alignment of each other, and as noted earlier the last structure in the sequence being the smallest of the three. There is no continuity in the form of repetition of features although the last two in the sequence are badly disturbed.

Post-Abandonment

Episodes of post-abandonment on the site document a wide range of activities and use of most buildings, sometimes a long time after they were abandoned. Modern disturbance and erosion within the shallow deposits at *Mosphilia* would have undoubtedly affected the uppermost levels within buildings; hence we do not have all the details from these episodes. In addition, as we saw, few buildings were replaced by new ones on the same location soon after or immediately succeeding their abandonment. The majority, after collapse, remained open in a ruinous state allowing their interiors to accumulate refuse deposits and mud wash. One building, as was mentioned, retains evidence for having been dismantled upon abandonment and we do not know whether this practice was repeated in other buildings in order to obtain structural materials although it seems likely. Others were re-used in subsequent periods. Ovens and firepits were found cut from their accumulated debris (e.g. in B1161). That this secondary re-usage was not completely random is evident from the position of a firepit dug in the post-abandonment fills of B1295 in a position that directly overlay the hearth of the last floor. Again, as previously mentioned when discussing post abandonment deposits at *Tenta*, we cannot be certain about whether houses would have lost their associations with specific 'families' after their abandonment and have

become open, communal spaces where a range of activities takes place, or whether they could only have been used by members of the same group or compound.

An interesting practice at *Mosphilia* that suggests how houses were regarded and used after they were abandoned is the digging of numerous grave pits that either slighted the walls of abandoned buildings or, in some cases, had been sunk into their ruinous shells, cut from their accumulated debris. Numerous examples are found in periods 3A, 3B and 4. Peltenburg argues that this kind of behaviour constitutes evidence for the existence of inheritance rules and rights to land ownership at the site (Peltenburg *et al* 1998: 87-8). The spatial associations of mortuary and living population thus points to a social organisation of descent groups (Peltenburg *et al* 1998: 86). Support for this argument comes from the location of several grave pits associated with the northeast walls of specific buildings, dated to the same period as the use of the house; a practice that has been noted at *Lemba-Lakkous* as well (Peltenburg *et al* 1985). However, in other cases this connection between the dead and the residents of specific houses seems more unlikely, since the graves found within abandoned structures of period 3B have been dated to period 4, between which periods, as we saw, there was a gap of 100-200 years. Oral memory can hardly survive beyond the time of a few generations unless there was a strong lineage system in operation or formalised and centralised ancestral veneration, neither of which finds support in the evidence at *Mosphilia*. One other case of post-abandonment activities related to the burial record that deserves mention, is the reverse practice from that noted above, that is the disinterment of the dead from the occupation phases of a building. This was noted in B2 where a pit was dug down from collapse fills to retrieve the bodies from an intra mural grave. The building was succeeded by a poorly preserved structure; hence it is likely that the retrieval pits were dug by the occupants of the latter structure

7.1.3 Contextual Analysis (table 28, figs. 13-16, 35-51, Appendix E)

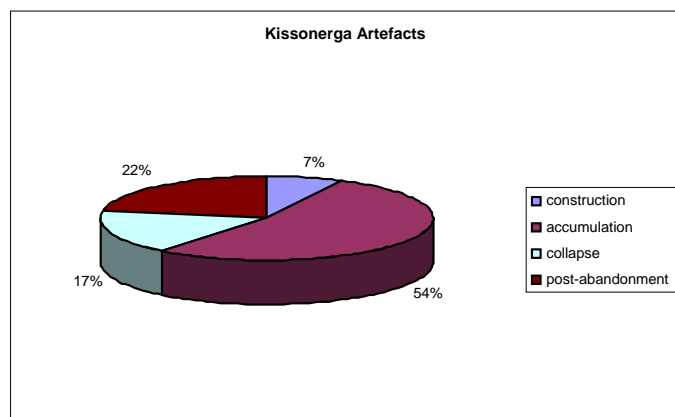


Figure 13. Percentages of artefacts by episode from all structures and periods at Kissonerga-Mosphilia.

In the following analysis the total number of artefacts associated with buildings' interiors has been tabulated according to their occurrence within their respective sequences of episodes as these were defined in chapter 2. The contents of 'closed' contexts (pits and graves) have been kept separate and analysed according to their location (intra mural, extra mural). A few points before we proceed should be made regarding site taphonomy as well as the analytical procedures followed by the excavator concerning contextual assessments (Peltenburg *et al* 1998).

A high number of artefacts were recovered at *Mosphilia* from buildings, numerous negative features and extra mural surfaces. Erosion and modern disturbance were the main causes of the poor preservation of the architecture and the difficulties of distinguishing stratigraphic associations between units, but also more importantly to the present analysis, for attributing assemblages to specific sequences within the histories of the houses. A further complication was the dense concentration of multi-phase components in the two areas that were exposed by excavation. Intense pitting during the long occupation on the site had disturbed and mixed a lot of the material. Other factors concern more specific cultural 'habits' of the Chalcolithic occupants such as recycling tools. Post-abandonment activities, for instance cutting tombs in the collapse debris of abandoned buildings or digging retrieval pits penetrating into the occupation floors have similarly affected the contextual 'integrity' of deposits. As Bradley (2001) has argued, concentrating solely on the degrees of disturbance or residuality of the material, which has dominated archaeological research and excavation reports, neglects other kinds of important relationships. He encourages us instead to view pits and other disturbances as 'channels that open between

the present and the past' (Bradley 2001: 155), since it is likely that they would have had a similar effect on people in prehistory.

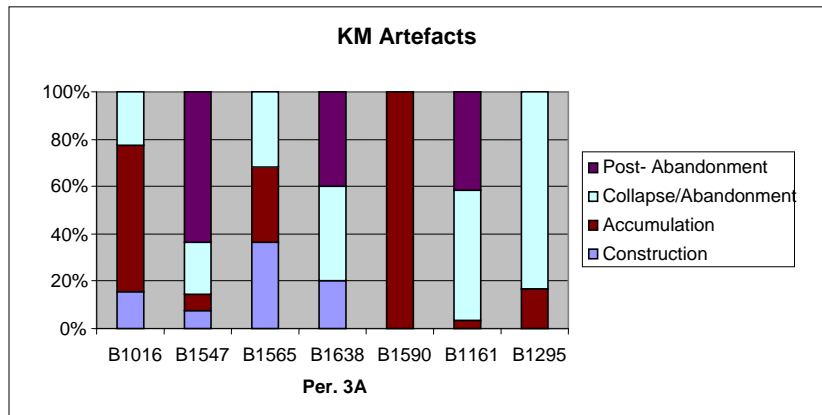


Figure 14 Graph showing the contribution of each episode to the total assemblage of individual houses in period 3A.

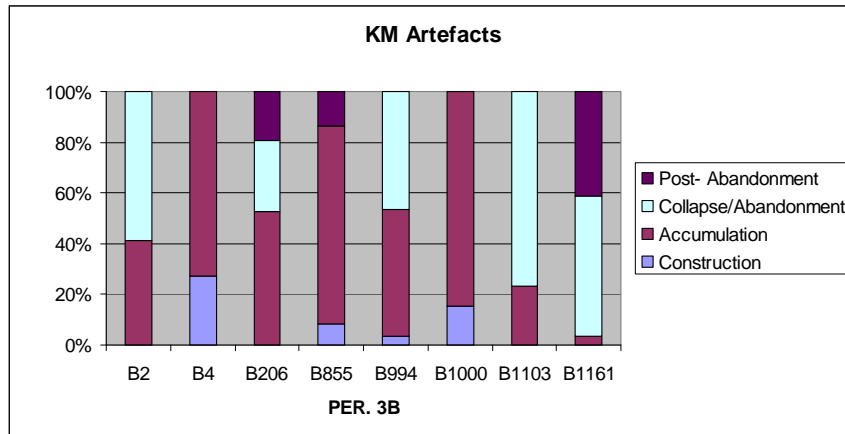


Figure 15 Graph showing the contribution of each episode to the total assemblage of individual houses in period 3B.

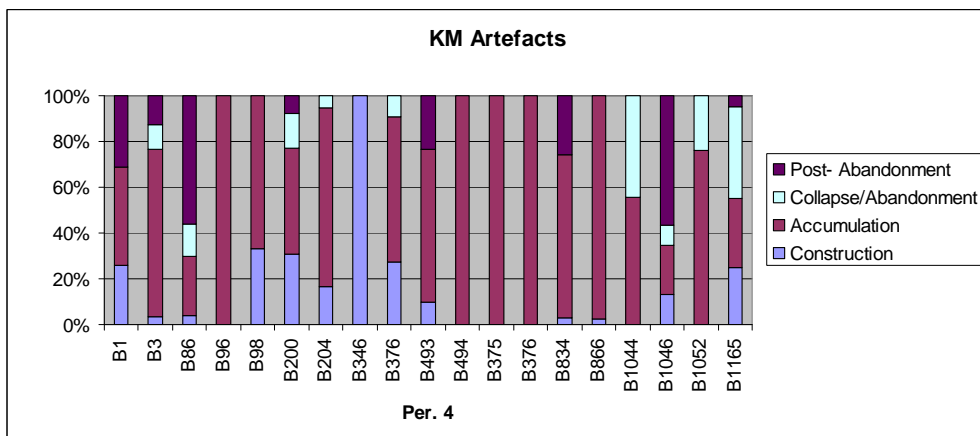


Figure 16 Graph showing the contribution of each episode to the total assemblage of individual houses in period 4.

However interesting such an observation is, and despite its potential for discovering links between present and past in prehistory as will be attempted in chapter 8, in order to go beyond the level of observation we need to be able to differentiate between and date these different prehistoric 'pasts'. We also need to be able to recognise how these residuals were treated, where they were deposited and how they were used beyond their initial discovery. For these to be realised, we need to have a solid stratigraphic framework and be provided with detailed information about the contextual 'integrity' of assemblages and their deposits. The appropriate place and people to provide these and facilitate subsequent researches, I think, are in the final reports produced by the excavators of the sites and based on their interpretation at 'the trowel's edge', even if the latter can never be completely objectified (Hodder 1999: 92).

At *Mosphilia* such a contextual approach, at the microscale, was adopted and incorporated into the research design of the project and the presentation of the artefactual data. In particular the excavators, noting the difficulties that were discussed above, ascribed all portable objects to deposition modes which were given integrity status. Hence, artefacts in the mode 'A' are associated with *in situ* occupation, 'S*' with supra floor fills and 'S' describe recycled items found in walls, foundations and installations. This methodology facilitated functional assessment and spatial analysis undertaken by Peltenburg (Peltenburg *et al* 1998: 233-40). In addition, it has greatly helped the assignment of objects to their respective episodes in the present work, although not strictly adhering to recording the assemblage according to the above modes of deposition, since this is a much coarser analysis with different aims⁵⁷. Some observations summarising the results concern the following aspects:

- The majority (54%) of portable objects derive from episodes of accumulation (fig.13).

A large number of small finds was recovered from the interior of the buildings excavated at *Mosphilia*. In the present analysis, as noted, episodes of accumulation describe the stages that are associated with the use and/or abandonment of the buildings. Hence, the above figure includes portable objects on or in the fill immediately above the floor. Inevitably, some artefacts will have become mixed with stages of collapse and post-abandonment

⁵⁷ Both 'A' and 'S' artefacts are assigned to episodes of accumulation unless they are found in 'closed' contexts in which case they are treated separately. 'S*' objects are included in either the collapse or post-abandonment episodes depending upon their context and stratigraphic position, but usually they are found above or mixed with collapse fills and well above floors.

taking into account the soil conditions that were mentioned above. It follows that buildings with signs of either sudden or deliberate destruction, where collapse debris sealed their contents, present more 'accurate' representations of object distribution (e.g. B206, B855, B3; figs. 36e-f, 37i). The percentage of objects that was deposited during accumulation episodes increased from period 3B onwards. In period 4 most buildings, regardless of the actual number of portable finds recovered from their interiors, show an equally or slightly greater percentage in accumulation episodes compared again to post-abandonment, suggesting more regular patterns in the late Middle Chalcolithic and continuity with the Late Chalcolithic period on the site (figs. 15, 16a-c). However, more detailed analysis of deposition in accumulation episodes by building in each period, while corroborating the above observation, shows a greater degree of variability. This suggests, as was noted for *Vrysi*, that there was not a normative behaviour associated with abandonment but it depended instead upon specific circumstances and events within individual houses' and domestic groups' life cycles. Hence, B1016 although dating to the 'cleaner' period 3A was abandoned with a number of artefacts not only on its latest floor (floor 2) but also between renovations episodes (floor 1). In period 3B some buildings had been cleared out before abandonment (with less than 10 objects on their floors) while others (e.g. B206 and B855) had been intentionally destroyed with a large number of artefacts left on their floors. The same variability is observed in period 4; although preservation bias accounts for some of the variability since in some cases only half or less than half of the floor area was preserved or excavated.

- A closer look at the buildings that yielded the greatest number of objects from accumulation episodes should take into account the fragmentation and types of objects.

The two buildings from period 3B that yielded the highest number of objects in accumulation deposits were B855 which was destroyed by fire and B206 which was demolished and abandoned. There are clear differences between the two assemblages. The majority of objects in Building 206 belong to only two classes: food storage and food consumption/serving while B855 yielded a wider range of artefact classes, more suitable to a 'domestic' assemblage (figs. 36e, f). The disparities- also observed in the fragmentation patterns (figs. 40i, j)- suggest either a specialised function for building 206, if we assume that they represent 'Pompeii premise conditions' as Peltenburg argues (Peltenburg *et al* 1998: 234), or different circumstances of 'closure' that were possibly triggered by different events.

The same observation applies to B3 although there is no comparative evidence from a destroyed period 4 building. However, the 200 artefacts recovered from its interior, most of which were complete and most of which belonging to four classes (fig. 37i) perhaps suggests another 'closure' event altogether, perhaps one that involved the participation of the community rather than individuals.

- 17% of the total number of objects (excluding objects from 'closed' contexts such as from pits and burials), were recovered from episodes of post-abandonment and a slightly greater percentage (22%) from episodes associated with collapse, whether sudden or gradual.

Whilst objects from collapse episodes would have been mixed with the underlying floor deposits, it is more difficult to account for the large numbers of portable objects from fills higher up. If we take these two episodes together as representing deposition following abandonment they account for 39% of the total number of objects recovered from buildings' interiors. Peltenburg has noted this pattern and provides a number of explanations, but no definite answers, for their recurrence in buildings fills, such as scavenging, squatter activities, displacement of objects from the roof or walls, erosion processes and use of the buildings' shell as a refuse disposal area (Peltenburg *et al* 1998: 235-7). One of the difficulties with providing a definite cause for their deposition is that their fragmentation patterns as well as their materials and function do not conform to what would be expected from unusable or broken domestic discard (figs. 35a-c, 17, 40a-o).

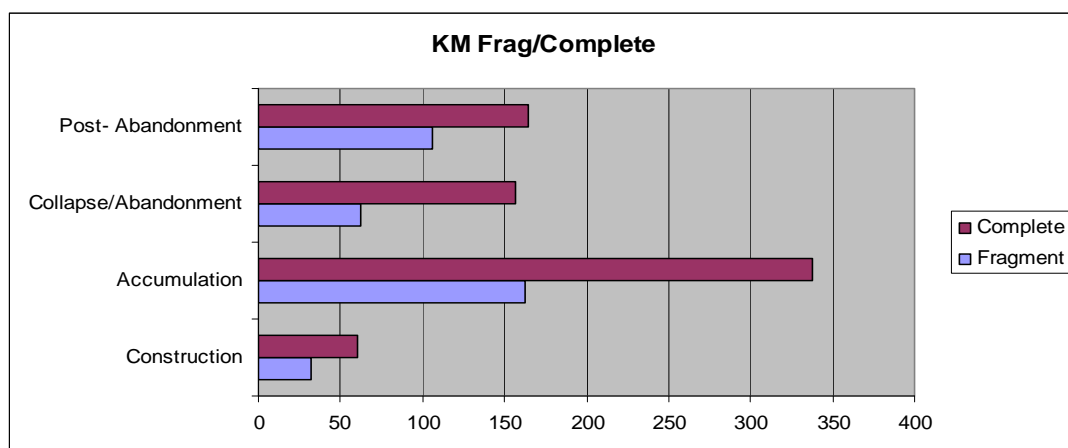


Figure 17. Graph showing the fragmentation of objects found in buildings by episode

- The results from the distribution of objects in 'closed' contexts by period and type are displayed in graphs 30-40.

Negative features were excavated from all periods and areas with period 4 producing the most evidence for both pits and graves (fig. 41, 48). Slight differences are noted in the chronological and spatial distribution; period 3B with very few intra mural negative features compared to the preceding and succeeding periods and to pits in extra mural space. However, it has to be noted that these numbers include pits that were dug in post-abandonment deposits, which account for almost half of all the negative features from buildings' interiors (fig. 44) and for 80% of the graves (fig. 47).

- A comparison between deposition in closed contexts and that in house interiors by period, assessing therefore the circulation and 'visibility' of objects within the community, reveals some interesting results:

In period 3A a great number of objects is deposited in pits, predominantly extra mural, which contrasts the floor deposition in accumulation episodes that was noted above (fig. 42). In period 3B, apart from the artefact classes that are equally represented in buildings' accumulation episodes, more 'ritual' related objects are found in extra murals pits (e.g. deposit 1015 in the Ceremonial area, see below for discussion). In period 4 the greatest differences observed in relation to artefact classes represented in pits and houses involves the deposition of storage vessels almost exclusively in buildings and very few in pits, while more ornaments are found in pits (including graves). The deposition of the latter shows that in period 3B the majority of ornaments are 'closed' in mortuary contexts compared to episodes of accumulation and to non-mortuary negative contexts. These patterns will be further discussed later in the chapter.

7.2 Marki-Alonia: Settlement Layout and History of Research

The site of Marki-Alonia (henceforth Marki) was excavated by an Australian expedition directed by D. Frankel and J. Webb, between 1992 and 2000. The site is located in central Cyprus, 16 km southwest of Nicosia, on the plain of the Alykos river valley, near the foothills of the Troodos massif; a position ideal for the exploitation of the copper rich Troodos foothills and favoured by other Bronze Age populations as well (Swiny 1989). In close proximity to the settlement area, four Early and Middle Bronze Age cemeteries were identified (Frankel and Webb 1996: 5-15, Sneddon 2002). Marki is considered a key site for

understanding the chronological and cultural sequence of especially pre-Middle Bronze Age as it has produced evidence for continuous occupation from the elusive *Philia facies* to the Early Bronze Age (thereafter EC) in the mid third millennium BC (Webb and Frankel 1999). However, no Chalcolithic settlements were identified in the vicinity and Chalcolithic material was absent from the settlement's contexts, hence the enculturation processes that integrated Anatolian migrants arriving at this time in Cyprus with the long-lived Chalcolithic villages remain poorly known (Frankel 2005). Kissonerga period 5 is too poorly preserved to elucidate this relationship any further (Peltenburg *et al* 1998). Frankel and Webb (2002, Webb and Frankel 1999) mention that the location of the site, close to copper sources but agriculturally unsuitable for the hoe-based farming practices of the Chalcolithic would have been a contributing factor to the dearth of Chalcolithic settlements in the area. In addition it is unlikely that Marki itself is representative of the *Philia* occupation on the island, since it is essentially a small inland village compared to the more substantial settlement in the Ovgos valley and the large cemeteries of Lapithos and Vasileia on the north coast (Swiny 1981, Catling 1962).

The occupation at Marki spans 500 to 600 years of continuous habitation on the site until it was abandoned in Middle Cypriot II (thereafter MC) in the early second millennium BC. It is this longevity and continuity that saw the succession of 16-20 generations on the site that is of interest to this research, as well as the large exposure of the 2000m² of the total estimated settlement area of 6 hectare. The longevity of the settlement, as opposed to shorter spans that were the case with the neighbouring *Alambra-Mouttes* (Coleman *et al* 1996) and the EC occupation at *Sotira-Kamminoudhia* (Swiny *et al* 2001, Manning and Swiny 1994), allows us to observe how the community developed through the history of several generations. Of particular relevance and value for the present research is the fine grained analysis offered by Frankel and Webb (2006a) and their disentanglement of complicated sequences and numerous episodes, ranging from short scale events to major re-arrangements of space within the contiguous, open and interior areas of the characteristic Early Bronze Age agglomerative and multicellular architectural system. This allows us to appreciate the remarkable continuity and regularity of house replacement strategies and the role of the bounded space of the household in forming 'family' and other social relationships.

On the basis of functional and spatial analysis the excavators were able to distinguish certain specialised areas and clusters of rooms along with bounded open spaces

as belonging to discrete compounds/households; separated at times by formal passages and lanes which towards the later phases of the settlement had become part of a more formalised settlement plan. Population estimates range from a founding population of 50 individuals to an expansion by EC III of about 400 people. Webb and Frankel (2001) note the implications of the demographic expansion for the viability of the village and for the processes of inter-generational cultural transmission to sustain economic independence and community integration (Frankel and Webb 2001). Population growth also affected the settlement's social and physical structure. Household relationships and location changed over time as population expanded, from freestanding compounds to dense occupation within the overall settlement area and from open spaces, informal structures and easily accessed courtyards to more 'private' compounds in terms of access (Frankel and Webb 2006b).

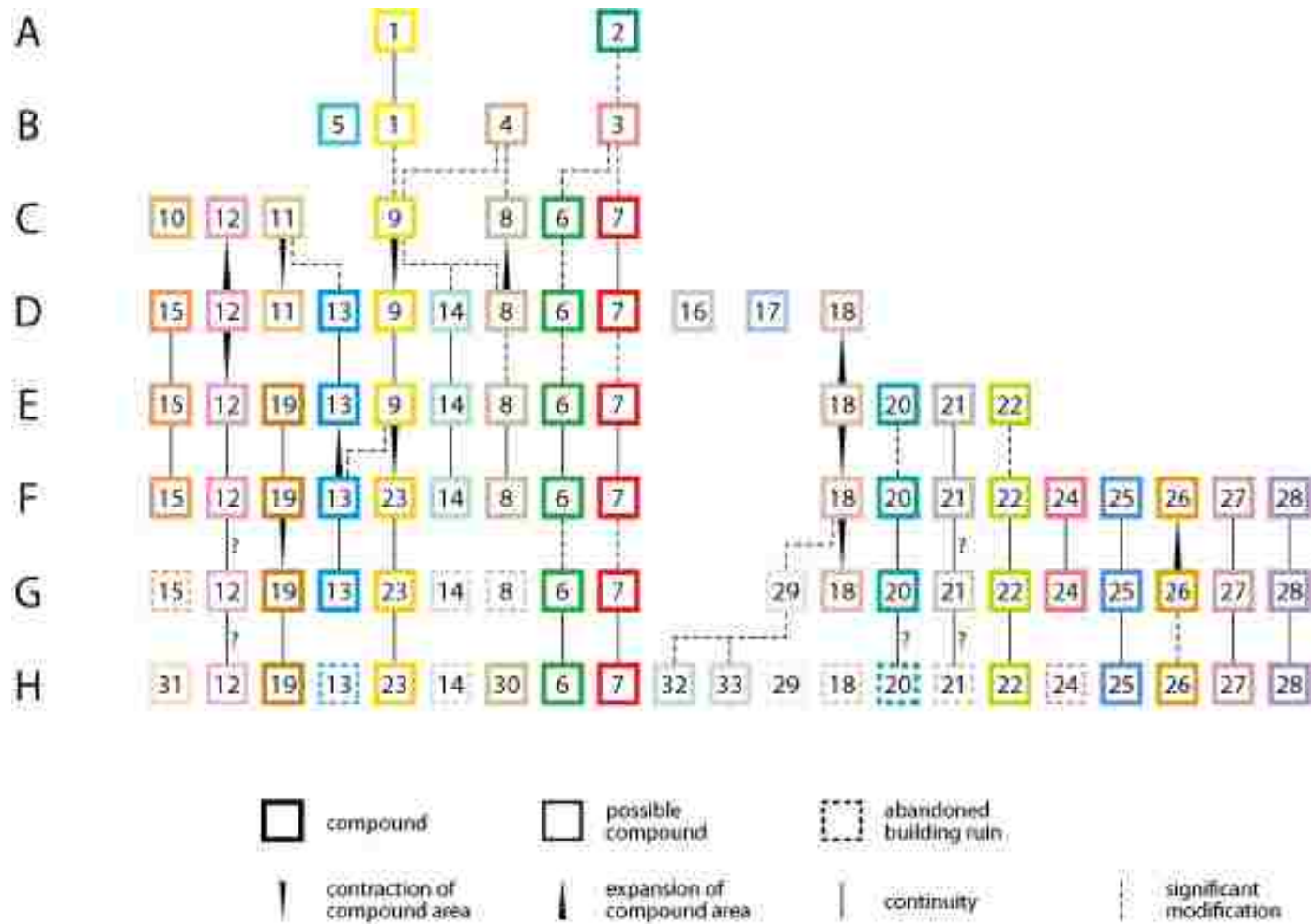


Figure 18. Schematic representation of house replacement: Marki-Alonia.

7.2.1 Replication patterns and house ancestry (tables 8-9, figs. 66-73)

Phase	Cultural Period	Approx Dates BC
A-B	Philia	2400-2200
C-D	ECI-II	2300-2000
E-F	ECIII	2100-1900
G-H	MCI	2000-1800
I	MCII	1800-1700

Phase	Single	Double	Triple	four	five	six	seven	eight
A	2							
B	2	2						
C	4	1	2					
D	4	2	1	2				
E	4	3	4		2			
F	5	4	4	1		2		
G	1	5	1	1	4	2	2	
H	4		4	2		2	1	2

Table 8. Chronology of occupation phases at Marki-*Alonia* and longevity of compounds

Phase	Repeated	Repeated/Altered	Continued	Displaced	Displaced / Continued
B	1			1	2
C		2	1	2	2
D	2	4		4	1
E	3	6		3	1
F	12	2		5	
G	11	4		3	
H	7	2			

Table 9 Summary of Replication Types at Marki-*Alonia*

Nine phases were distinguished by the excavators (A-I) which describe the internal sequence and stratigraphy of the site and group together episodes of construction and accumulation within the time of two or three generations (50-70 years). It is a comparatively fine scale of analysis that we have available for the total of 33 excavated compounds. Again, like for all the sites that were described thus far, there are no site-wide destruction horizons and it is only through studying individual compounds and their temporal and spatial depth

over time as they were built, abandoned and re-occupied that we can reconstruct their life histories and begin to acknowledge how successive generations understood and occupied the landscape.

In this respect, it is easier to trace the development and replication patterns in each compound treating them as independent architectural and social entities (following Frankel and Webb 2006a) using the site's phasing system as an overall guide, rather than as synchronous developments across the site or alternatively as separate units/rooms. Within this broad categorisation individual rooms and courtyards identified by the excavators as belonging to specific compounds underwent minor and major renovations; some incorporating rooms belonging previously to different compounds, others changing completely their orientation; or adding partition walls and subdividing the available space into smaller rooms. Courtyards and other open spaces often become roofed living areas, especially from Phase D onwards, usually within the same compound but sometimes the open space is taken over by a different household (e.g. comp. 9). It has to be noted that the nine phases that are taken here as nine generations of houses (tables 8-9) were established mainly as groupings of major rebuilding activities, notably the establishment of new houses, or the abandonment and demolition of others (Frankel and Webb 2006: 37-41). Within the time span of a single phase some compounds were established, either as independent new residences, or as offshoots from the parental household (Frankel and Webb 2000, 2006a, b). In the mean time, certain compounds remained exactly the same, occupying the space that was established in previous phases, with or without minor renovations. Given the variability in house maintenance and the reflecting needs of changing family structures, this broad succession of generations of houses should be best seen as snapshots at times of changes within the developmental cycle of the community and the domestic group and more difficultly within the shorter life cycles of individuals. These snapshots, viewed successively, give us a vivid idea of the dynamic nature of households and their houses as Frankel and Webb (2006a, b) have shown in their analysis of compounds and the negotiation of space between domestic groups.

The characteristic house replacement strategy practiced at Marki was the almost complete demolition of earlier walls and the construction of new buildings, sometimes following closely or more haphazardly the same alignment and others completely restructuring the space occupied by the previous walls. It is immediately apparent that certain compounds lasted for several generations, notably compounds 6 and 7 (figs. 18, 66-

72,) while others fission and become fragmented resulting in horizontal displacement and the filling of the entire settlement area (**'displaced/continued'** or **'displaced'** replication type). Tables 8 and 9 provide a summary of the replication patterns. There, we see how, as the settlement expanded and new compounds were established, some of them in subsequent phases had the option to either 'repeat' the locations of their predecessors; significantly alter the 'inherited' space, by adding or demolishing units, expanding or contracting their area; or relocate. In Phase E a number of households (six)) altered their 'inherited' land while in Phases F and G several compounds (twelve) seem to have retained the basic plan and orientation of the previous ones, suggesting that by that time more formal inheritance rights would have been established.

It seems thus that by the time of Phase E and F several compounds had accumulated a house ancestry of 4-5 generations, that is, 10 to 14 biological generations or in the case of compounds 6 and 7 a house ancestry that would have spanned the entire history of the settlement. At a shorter scale, some compounds undergo major restructuring in their interiors sometimes without any accompanying rebuilding of the outer boundaries. Characteristic are the cases of subdividing or opening up rooms, blocking accesses between spaces and the fluctuation in the number of installations and furnishings between renovations according, presumably, to changes in the household composition.

7.2.2 Overview of Episodes: Continuity and Discontinuity

The following brief overview discusses major episodes of construction and accumulation within the sequences of two compounds (or groups of successive compounds). A different format is hence followed below than that in the previous case studies⁵⁸

Compound 2/3/6-7 (house ancestry: 8 generations⁵⁹)

Compound 2 was established in the earliest Phase (A, Philia) as a two room complex. Its boundaries are poorly preserved but it is likely to have included an open space in the north and perhaps a small timber informal structure to the east. It is not clear whether the western of the two rooms was an enclosed or open space. A pithos burial was found in its centre containing the skeleton of a child.

⁵⁸ The second volume of the publication (Frankel and Webb 2006a) includes descriptions of construction and accumulation episodes in each unit in great detail, therefore a detailed account would be redundant here.

⁵⁹ House generations: every 50-70 years

Following its abandonment, the walls were completely demolished- as was the case for most construction work at Marki- and a new foundation trench was put in for one of the new walls. The structure that replaced the eastern room of the complex was a room for the newly founded compound 3 (Phase B) which now occupied a considerably expanded area compared to its predecessor. A characteristic practice at Marki, during construction episodes was the combination of partial or complete demolition and re-building on the stubs of the previous walls, in tandem with retaining some of either the partition or the outer walls of earlier structures; a practice which is noted here in almost the exact repetition of the previous alignment using an earlier partition wall as an outer boundary and rebuilding the remaining surrounding walls. The ca. 112m² area⁶⁰ of the new household comprised three rooms and an open space shared with compound 4 that contained an animal pen and installations. The latter complex was built at the same time as compound 3 and it is likely that the two compounds represented an extended family arrangement with access to a communal courtyard and shared resources (Frankel and Webb 2006: 313). In terms of continuity between renovations and rebuildings, apart from the same alignment we note that the replacement room had more features than the previous one and the earlier space with the pithos burial now belonged to another compound (comp. 3), as most probably an interior space. Again, more features were associated with this space than in the earlier one, notably an oven the plastered surface of which now sealed the pithos burial.

The next phase (C) involved more radical transformations in the area of compounds 3 and 4. Two new households (compounds 6 and 7) were established with a complete re-arrangement of compound space and of probably inter household relations. Frankel and Webb (2006a: 38, b, Webb 2002) argue that this is a characteristic example of the progression from sharing to more private areas that is observed site-wide, as the communal ethos of the previous arrangements was replaced by two separate complexes with sharing walls but no direct access to one another. The genealogical connection of these inhabitants to the families of compounds 3 and 4 is evident in the repetition and enclosure of some of the previous room spaces pointing to the existence of inheritance rights (Frankel and Webb 2002). Overall, however, the re-arrangement of space is discontinuous with the one in previous phases. The area inherited from compound 3 is divided between the two households. Compound 7 includes in its boundaries the western room of compound 3 while compound

⁶⁰ Note that measurements were taken from scaled plans, hence they are not accurate. The overall area of a compound includes its courtyard as well as open spaces between rooms (table 30).

6 incorporated a bigger area that included the eastern room of compound 3 and the communal courtyard as well as the western room of the earlier compound 4. The latter space kept roughly the same alignment of the walls and it is attributed to an offshoot household (comp. 8) of the parental compound 6.

The two large compounds (6 and 7) show a remarkable continuity and longevity as they now remain established within these boundaries for another 250 to 350 years. This has implications for the development of property and inheritance rights as well as vertical transmission and genealogical memory. However, we cannot know the details of these mechanisms, for example who inherits the space and heirlooms of the house, e.g. virilocal or matrilocal (*cf* Frankel 2002). It is characteristic of the dynamic nature of household composition and the changing relationships among members that whilst the rough boundaries of the land that each household occupies remain the same, the use of space between successive generations changes radically. This is noted in table 29 where we cannot classify them as 'repeated' houses anymore ('repeated/altered') because of the constant re-alignment and division of space. In other cases, where the alignment remains the same or some walls are re-used the space alters significantly with the addition, for example, of hearths in the interior rooms of compound 6 (phase E) and the remodelling of the entrance. This general pattern is noted in other long-lived compounds as well, for example in compound 9.

An example from compound 6 illustrates the above points regarding alteration or re-organisation and displacement. At the end of Phase D the south-eastern room (XCIII) was abandoned and partially demolished. The new wall was placed directly over the stub of the previous wall (but offset by half its width), retaining thus the general alignment of the room. The remaining width of the previous wall was now visible in the interior and was re-used as a bench a practice that is observed in several episodes of demolition and rebuildings within the same compound as well as in other compounds. All of the installations which occupied the western area, like a bench, bin and hearth were removed and new ones were placed in other parts of the space. The reasons for this re arrangement would have been to close off this room from the one on its north, since the access between the two was now blocked by a new continuous wall. In the next three phases the interior space of the room underwent several renovations but not involving demolition or major rebuilding of walls. Most of its fixtures were either remained in use for another 6-9 generations of inhabitants, or were replastered or replaced retaining the original position. There is no evidence that at

any stage it remained unoccupied like we see in other compounds (e.g. compound 8). Following its abandonment in Phase I, at a time when the settlement has relocated elsewhere and most of the compounds had been abandoned, the body of a young adult was interred in a shallow pit in a space the last usage of which was an interior hearth room.

Compound 15 (house ancestry: 3 generations)

The longevity of compounds 6 and 7 are suggestive of the emergence of kin relations based on descent from a common ancestor. However, their situation is not the same for all compounds. Apart from cases where the excavators have pinpointed possible parental connections of newly established households to older compounds, there are cases where new compounds are horizontally displaced hence not maintaining an active link to older households. This occurs especially in the later phases of the settlement (from phase F onwards). A series of small compounds for example, 25, 26, and 27 was established to the previously open area in the northern edge of the settlement.

The example of compound 15 is informative because although poorly preserved, it shows the disparities in the vertical (temporal) depth that each house acquires during its history. It was founded in Phase D as a three room compound with a western entrance opening directly onto the lane that had been established by Phase D. It possibly had a longer history, since several pot emplacements were located below its floor but we do not know anything else about this earlier building phase. As it was the case with several construction episodes, the walls and floor surfaces of previous houses were completely demolished and levelled to receive the new structure. We do not have a big enough sample to appreciate the differences between these practices of complete demolition and the alternative methods of construction which was to align the new walls by placing them above the wall stubs of the previous ones and whether these would have affected or indeed resulted from different rules of inheritance and relocation. For example, Compound 15 continued almost unchanged, save for some interior renovations, for another two phases (100-150 years) before it was abandoned and was left to collapse and decay, standing in a ruinous state for some time. In phase G other compounds were in similar states of collapse and disintegration. Compound 14 was abandoned and was not reoccupied again while compound 15 as well as compound 8 were briefly re-furbished and re-used as monocellular compounds 31 and 30.

7.2.3 Contextual Analysis (table 31, figs. 19-20, 52-55)

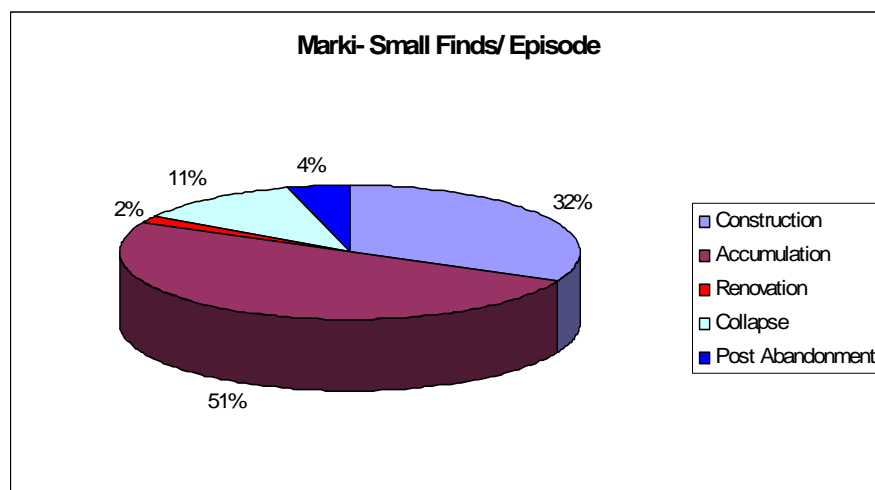


Figure 19 Graph showing percentages of artefacts by episode from all compounds and periods at Marki-Alonia

The system of recording at Marki reflects the particular attention paid to contextual associations with regard especially to the effects of the various formation processes on the contextual integrity of the artefactual assemblages. As at *Mosphilia*, various complicating factors warranted such an approach in order to differentiate between depositional contexts within the buildings' sequences. A particular problem at Marki concerned residual material redeposited in episodes of construction and/or extensive remodelling. In the first volume of the final report which dealt with the results from the first seasons of excavation (Frankel and Webb 1996) all the material was assigned to 'sources' that reflected their degree of integrity or residuality⁶¹.

⁶¹ The system was abandoned in the second volume (for explanation of the adjustment of their recording system and the differences between the two volumes see Frankel and Webb 2006a: 3-4, 29-31).

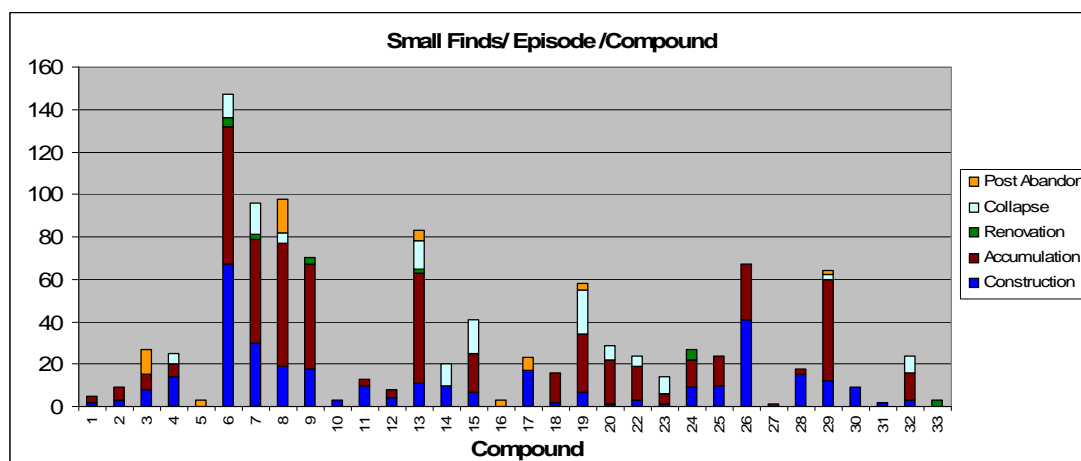


Figure 20. Graph showing the contribution of each episode to the total assemblage of individual compounds.

- The majority of artefacts were recovered from accumulation deposits (53%, including the limited number in renovation episodes).

It has to be noted that the stratigraphy and preservation of the units associated with episodes of accumulation, e.g. lack of identifiable floors, frequent demolitions of features and depletion of artefactual assemblages during numerous re-arrangements, rarely allows for accumulation deposits to be treated separately from abandonment, collapse/decay or renovation. This is a general situation affecting the distribution of portable objects site-wide that is noted by the excavators. Hence episodes of accumulation, in this case, refer to the deposition of objects during several events over the course of what appears to be pre-planned gradual abandonment of dwellings (Webb 1998). Consequently, the overall percentages that graph 19 show are bound to be distorted by the above depositional factors⁶². Moreover, looking at the distribution of objects by episode in each compound as displayed in figure 20, we note that the majority of compounds yielded few objects in accumulation episodes (22 compounds produced less than 30-35 objects). Hence, we need to consider the few individual compounds which have contributed the highest numbers to the overall pattern noted above. As would be expected, there appears to be a correlation between longevity of compounds and number of objects on building floors. For example, we need to take into account the fact that compound 6 with the highest number of portable finds was one of the longest lived compounds that spanned several generations; the same

⁶² Frankel and Webb (2006a: 153) note that they might have initially overstated the case of severe depletion of floor assemblages, especially in relation to complete or near complete ceramic vessels.

applies to compound 7. Lower numbers of objects were found in compounds that were established late in the life of the settlement or that were abandoned at an early stage.

Conversely, the relative high numbers from compounds 13 and 29, although they were in use for considerably less time than compounds 6 and 7, had an overall bounded area, the former fluctuating between 39 and 79m² over the duration of 4 phases whilst the latter was one of the largest compounds, at ca. 130m². Indeed, the break down of artefactual assemblages according to phases within compounds shows the paucity of finds in abandoned floors that has been discussed by Webb (1995) in relation to curated behaviour.

- A substantial percentage (32%) was recovered from episodes of construction (fig. 19).

The percentage would be much higher if the sherdage was included. As discussed earlier, in episodes of construction the walls are demolished and in many cases the surface is levelled and new foundation trenches are dug using domestic refuse as fill. It is in these episodes that the most residual material was deposited.

- A low percentage of artefacts were recovered from collapse and post-abandonment deposits (11% and 4% respectively).

It has to be noted that episodes of post-abandonment were not distinguished at Marki. I have taken as representing these episodes the contexts that post date the use and abandonment of compounds. In most cases, these are cases where compounds are left as ruins or revert to becoming open space⁶³. Unless there is a preservation and excavation bias, it is curious that not more artefacts were found in those compounds that had been abandoned but not replaced, e.g. compounds 14, 18, 21 (see fig. 55). We would normally expect to find higher number of domestic refuse that would have been accumulating within the ruinous interiors of abandoned structures, much like we discussed in the case of *Tenta*. On the other hand, this might also reflect cultural rules implying perhaps that inheritance rights are more permanent than 'ephemeral' buildings or life-cycles (see also fig. 54).

⁶³ These contexts and units are not given a compound number by the excavators and are described as open spaces, informal structures etc. This reflects the established in archaeology concept of a definite use-life of material things, as was discussed earlier. Hence, once buildings do not fulfil their 'purpose' cease to exist as material and meaningful entities.

7.3 Discussion: *Repeated Practices at Mosphilia and Marki*

Two very different practices of house replacement are attested in the two sites that were examined above. At *Mosphilia* the main pattern of replication was that of horizontal displacement following settlement dislocation at least twice over the long period of occupation on the site. Intriguing exceptions to this norm were also present as well as multiple lines of evidence pointing to the importance and symbolic status attached to the Chalcolithic house. At Marki, an Early-Middle Bronze Age site with a shorter span of continuous occupation we find evidence for a multi-phase settlement with complex sequences of a series of rebuildings and renovations. The multi-room compounds repeated the positions of the previously demolished walls of their predecessors establishing, in certain cases, a long house ancestry of up to 8 phases or generations of houses. In spite the disparities, however both sites offer glimpses, from different perspectives, into variable repeated practices and spatial references.

7.3.1 Memory and *Place* at *Mosphilia*

In many respects, the long-term occupational history at *Mosphilia* can be regarded as **discontinuous**. Horizontal displacement is the characteristic replication type. Successive overlapping walls do not show a clear pattern; there are no 'repeated' houses and two of the three 'enclosed' type buildings that were discussed above are considerably smaller and evidently different from their predecessors. They repeat the alignment of the earlier buildings, and in the case of B86 the entrance and hearth of the underlying B3, but they do not 'keep' the specific associations and function of the previous buildings. B86 was not a storehouse, hence it was not acting as a replacement for the Pithos House; while in the second case, by the time of B200, the building was probably used as an animal pen (Peltenburg *et al* 1998: 45) and its arrangements did not resemble those of its predecessors B855 and B493. The manner in which they were abandoned also differs from the earlier, possibly intentionally burned and ritually 'closed' buildings (Peltenburg *et al* 1998: 253).

Further discontinuities that could have also had an effect on how and for how long social and 'family' memories would get passed on are reflected in the practices associated with abandoning certain houses with large numbers of artefacts left on their floors. Hence, objects are repeatedly removed from circulation and 'entombed' in the houses' interiors (Tringham 1991, Lane 2005). There is no evidence that these are cached with the view to be

retrieved at a later date or that subsequent scavenging took place. As the contextual analysis showed, a large number are complete and they represent a wide range of functional classes, including 'valuable' or personal objects such as ornaments. From period 3A onwards great numbers of artefacts are deposited in pits, especially extra mural, and by period 3B in mortuary and other ritually structured contexts as well as on recently or long abandoned floors (see contextual analysis above and Peltenburg *et al* 1991, 1998). Their deposition at different stages within the house histories is variable but there are no obvious differences between functional classes or fragmentation patterns that would immediately point to an explanation for their disposal in one or the other context or stage; for example fragmented or complete, utilitarian or symbolic. In some cases, they appear to have been subject to structured deposition, for example in the cases of B206 and B3 and in the case of mortuary and certain non-mortuary deposits (Peltenburg *et al* 1991), in others the reasons are less clear; for example in post-abandonment deposits. Although a much more detailed analysis is needed to review all of the above in a case by case manner, the point to consider here is to what extent their low visibility would have affected the formation of durable social memories and relationships (Hendon 2000). How would the long term discontinuities have affected the community at *Mosphilia* in the short term, that is, within the life cycle of one or a couple of generations?

The frequent dislocation of the settlement focus, which is characteristic of Ceramic Neolithic and Chalcolithic settlement patterns in Cyprus, means that the associations between places and people or between places and events could have easily been forgotten or re-interpreted in radically different ways as people moved on to new locations. At *Mosphilia* the evidence at our disposal is rather limited since we do not know, as noted earlier, the exact details of occupation and re-occupation in the particular landscape, especially in the earlier periods where only ceramics were recovered, mainly redeposited in later contexts. More evidence, however, is available for short term discontinuities, such as between periods 3A and 3B where the settlement focus shifted southwards. The two exposures are only 50m apart and at *Lemba-Lakkous*, where a similar settlement drift was noted, buildings were founded in previously unoccupied ground 100m eastwards. At *Mosphilia* another dislocation took place in the succeeding period 4 before the area was re-occupied two centuries later. The reasons for such short scale displacements have not received the same attention as the longer term discontinuities (*cf* Peltenburg 2003, ch. 24). The excavator sees the episodes of intra settlement locational changes as conscious socio-

political strategies (Peltenburg *et al* 1998: 259-50). However, abandonment of certain locales might also have been triggered by and/or subsequently avoided according to cultural norms of taboos, pollution and misfortune associated with particular houses or deaths, as is widely documented. In any case, these actions would have disrupted the line of genealogical memory. This is more evident in the series of superimposed buildings that were noted above and the lack of formal 'repeated' plans that could be taken as evidence for the development of property rights or concepts of descent. Research on inter generation transmission, based on oral narrative alone, has shown that the details of specific memories of events or of people do not remain constant for more than one to two centuries (Vansina 1972, Henige 1974). Genealogical reckoning, hence, does not extend back more than four generations (Waterson 1990: 159), which is the duration of the known gap at *Mosphilia* between periods 3B and 4 (Peltenburg *et al* 1998: 18-20).

Yet, in other respects, *Mosphilia* and other Chalcolithic sites in Cyprus provide a wealth of evidence for short term commemoration as well as elements of **tradition** that cross cut specific generations or communities; such as house symbolism and architecture (Peltenburg 1988, 1989, 1990, G. Thomas 2005) and the development of a shared symbolic language based on the production and exchange of the stylised picrolite figurines and pendants; as well as the proliferation of distinct island-wide ceramic decoration (Peltenburg 1991b, Bolger 1996, Morris 1985, a Campo 1984).

In addition there is evidence to suggest the performance of **repetitive practices** which are integral to social reproduction. Such acts are all the more important to societies without institutionalised authorities or to weakly integrated groups (Bourdieu 1990). The evidence concerning the nature and timing of floor and wall replasterings at *Mosphilia* may be one such way to reconstruct repeated cycles of undiscursive yet ritualised behaviour associated with the house. Such behaviour is perhaps reflected in the way floors were replastered. The eastern segment of several houses, as was mentioned, was segmented from the rest of the floor space by means of either low mud ridges, partition walls or screens. This segment was well maintained with smooth plaster surfaces that clearly distinguished this area. In one building (B206) the plaster floor was painted red. In another (1016) the eastern room was raised with the addition of a pebbly layer. The plaster surface of the central hearth in one building (B855) was stained with vivid colours. A broken figurine had been placed in a hollow below the hearth. In another building (1046) the wall was decorated with sherds embedded in its plaster creating the effect of a red on white mural decoration. In B1547 a

succession of six replasterings was excavated, associated with various refurbishments and redecorations. The excavators were able to distinguish a sequence of alternating thin surfaces: while plaster followed by a smoother white plastered surface, an orange stained mud surface retaining evidence of red pigment and a final plain mud floor. The variation in floor and wall plastering might be more than a recurrent maintenance process. It might be that we have found instances of short term temporal cycles that would have been meaningful to the people living in the specific houses; or instances of how people would have understood and incorporated aspects of social and ritual time in their everyday lives. Anthropological examples illustrate how sequences of plaster record specific temporal rhythms (Boivin 2000). In India materials of different texture, colour and technique are employed according to annual cycles, festival celebrations, births, deaths, marriages etc. Hence, floor space, becomes an integral part of the various *rites of passage* and helping transform the house from 'liminal to everyday and the reverse' (Boivin 2000: 377, Van Gennep 1960).

Another example of **continuous practices** that would have created specific associative memories was the interment of the dead within the shells of abandoned buildings. As discussed earlier burials were found in many post-abandonment episodes, either in the accumulated debris within buildings or slighting their walls. Some of them would have been kin related to residents of the house (Peltenburg *et al* 1998: 88). In other cases though this is more difficult to prove since they belong to separate and chronologically distant events. Whatever the relationship between the deceased and the living such intentional commemorative acts, far from lacking formal structure as this is expected from mortuary rituals, or being unreflective, illustrate the active role of the house within people's life stages. Alternatively, if we wish to go further and consider the possibility that houses were considered as animate agents themselves then it is the reverse that is commemorated, that is the human burials mark the house's crossing to another stage rather than the other way around. By 'dramatising' the house in such a way it is not allowed to be forgotten; it acquires associations (Tuan 1977, Kühler 1988). A similar meaning could have been attached to the act of dismantling the structural elements and furnishings of B2. Recycling of materials would have regularly taken place. In this case, however, the excavator notes the unusual practice of removing the hearth and the door pivot (Peltenburg *et al* 1998: 31); two elements that are integral to a 'living' house. The hearth is often associated with reproductive capacity, eating and the creation of connect ness among kin (Carsten 1995, Bloch 1998). By

removing these structural elements, the substance of the house is taken away; rendering it thus *inalienable*, much like the object deposition and house destruction that we saw above (Wiener 1992). Hence, a theme that is emerging from the Chalcolithic evidence concerns the creation of social memories associated with house histories and autobiographical events. In particular, the mnemonic practices almost exclusively concern ephemeral material forms; in the sense that the production of memory depends upon its destruction and deliberate forgetting, processes that generate intense mental images and conscious recall rather than explicitly visual and material forms such as the production of monuments or mnemonic devices (Whitehouse 1994, Kühler 1988).

The most vivid examples of repeated practices at *Mosphilia*, are those that illustrate re-enactments of specific memories; that is, associated with specific events which would have been relevant to certain individuals and generations and recalled as **autobiographical** memories (Whitehouse 1996). The ceremonial deposit from *Mosphilia* has been extensively discussed and published in detail (Peltenburg *et al* 1991, Bolger 1992, 1996). Briefly, it concerns a red-on-white building model containing numerous stone and ceramic figurines, a triton shell, ground stone tools, pebbles and a terracotta model stool. The vessel was deposited in a pit in an open area bounded by a group of centrally placed large circular buildings where a concentration of earth ovens was also located. A building was founded immediately above the pit. At this stage the rim of the vessel that covered the deposit was incorporated in the floor of the building. The terracotta figurines are all female. One seated figure depicted childbirth; another had a grotesque facial expression, perhaps an attention focusing device (Peltenburg *et al* 1998: 42-3). Associations with fertility and parturition are clearly expressed in the representational artefacts. Goring (1991) argues that the figurines could have fulfilled a didactic role or they could be used as part of initiation ceremonies associated with childbirth. The figurines in the particular group might also display different stages of childbirth. Examination of the condition and wear of the figurines showed that they had been handled, hence although deposited as part of a specific ritual, they were not produced to be buried (Goring 1991: 158). All the ceramic and most of the stone figurines were deliberately broken prior to their deposition in the pit. Another object in the same deposit worth mentioning is the building model. It depicts a circular structure with a door, central hearth and floor ridges; structural elements that resemble contemporary buildings (e.g. B855). Its walls are painted in vivid red-on-white designs which had been coated over by a thin layer of buff slip. Bolger has suggested that the building model might represent a

birthing hut given its associations with the specific figurines (Bolger 1992). It is possible then to consider the events that accompanied its deposition, as birth or initiation rituals witnessed by a restricted number of people⁶⁴ and involving specific stages within one's life cycle. Another example of rituals that would have triggered the recall of autobiographical memories would be the closure ceremonies upon abandonment of houses that involved the burning or dismantling of buildings and the deposition of numerous objects on their floors.

Could we be seeing at Mosphilia and by extension in the Chalcolithic period in general, the existence of an imagistic mode of memory, similar to what Whitehouse (1994, 1996, 2000) has postulated for the non-institutionalised Melanesian societies? The central tenet of his thesis that distinguishes between the imagistic and the doctrinal mode of religion as characterising two different socio-political formations is based on the cognitive demands that different rituals have on working memory. His insights using anthropological examples and the findings of cognitive psychologists are relevant here, that is, we extend his arguments beyond the domain of organised religion for which we have no evidence in Cyprus at this point. Episodic memory, as discussed in chapter 3, refers to events that one has personally witnessed what we normally refer to as autobiographical memory. One kind of episodic remembering are the so called flashbulb memories (Brown and Kulik 1982); vivid memories of extreme emotions and even cognitive shocks or of crucial life changes and stages that retain their accuracy and emotional force of experience for long periods of time (Pillemer 1998). Initiation ceremonies are such autobiographical experiences that can trigger powerful flashbulb memories (Whitehouse 1996). This model has implications for inter generational transmission, since these 'rites of terror', as Whitehouse describes certain Melanesian initiation ceremonies, are, in essence, infrequent events, witnessed and differentially experienced by a restricted number of people with little scope for these to become shared by a larger number of people, contemporaries and descendants. At *Mosphilia*, the explicit association of these rituals with the house as the locus of their performance but also as an ideology is an important one; for it means that although we might be seeing incipient stages of inequalities (see Peltenburg 1991a, 1993, 1996, 2002), there is not as yet a strongly articulated social institution to regulate and more importantly to normalise individual experiences and autobiographical memories into canonical, that is, widely shared social memories.

⁶⁴ Although this is not the excavator's interpretation of events (see Peltenburg *et al* 1991; Peltenburg 2002)

7.3.2 Memory and *Place at Marki*

At Marki, the most conspicuous one practice that point to **continuous practices** is that of house replacement at the same location. The longevity of some compounds occupying the same area for generations was particularly noted. There are no apparent topographical or ecological factors to account for the observed adherence to the specific construction methods. The landscape would have provided ample space for horizontal expansion, as it did occur in the later phases of the settlement's history, if there would have been a desire to apply distancing measures and to keep the residential spaces as free standing compounds, such as those that were founded in Phase A. Hence, it is clear that by the ECI there was an increasing importance placed on the repeated position of locus of residence signalling the emergence of new kinship systems (Frankel and Webb 2006b). Studying the settlement's history through the vertical sequences of the compounds, as the latter were functionally defined by the excavators, has allowed us to take a long term view of how genealogical memory would have been produced in close association with the attachment of people to specific locales; and *vice versa*.

Despite, however, the static appearance of a rigid inheritance system in place, the histories of individual compounds, rooms, furnishings, offshoot households and numerous, constant re-arrangements illustrated the flexible and changing nature of household dynamics, individual decisions and differential inter generational transmission. Throughout the 500 year occupation span, the basic 'visual' rules with regard to form, materials and alignment remained constant. However, within this generalised 'norm' there was room for **innovation, negotiation** and even fission and dislocation. This was particularly apparent when, in Phase D a more formalised layout was established with laneways and more controlled access. As Frankel and Webb note (2006a: 314) the re-arrangement of compounds would have now involved a greater deal of negotiations between neighbours that, they suggest, might have required the operation of communal decision making mechanisms. Complex negotiations would have also taken place between kin related households over the allocation and division of 'inherited' space. In some cases, we can trace over time when some households would expand taking over considerable areas from neighbouring households while other would retract into a single room compound (e.g. Compound 9).

At other times, families would have had the opportunity to make decisions according to their individual developmental cycles. In a number of instances, rooms were subdivided, creating thus a greater number of private interior spaces, entrances between

rooms or between rooms and courtyards were blocked and relocated, and furnishings were constantly changing positions. Apart from a few cases where the hearth retained its position, very little seem to have remained the same between rebuildings or renovations, apart again from the general multi-cellular appearance and general alignment. Remodellings of space would have also affected movement and interpersonal relationships creating different routines and circulation patterns. One interesting, possibly **unintentional** building practice that would have made explicit visual references to the past, involved the positioning of the new wall half way over the width of the previous one. The old wall was used as bench along the length of the interior wall of the new house, acknowledging thus its history, in contrast to negating any associations with the past by demolishing earlier walls before rebuilding on at the same location. That this practice did not have a tactical element is supported by the fact that it is observed in both long and shorter lived compounds.

Frankel and Webb (2006a; 318) note that at this point there is no evidence to suggest that there were social inequalities based on wealth accumulation by a few economic elites. The social integrative system was largely based on independent extended families living in equal size compounds and on a household based regulation of production and consumption. Inequalities, however, appear at another level, as some households maintain their land boundaries while others fission or contract. Inequalities then are based on the success of certain households to amass 'time' in the sense of symbolic capital (Bourdieu 1990) rather than material wealth. The longevity of compounds 6 and 7 based perhaps on claims of descent from the founder families of the Phase A (Frankel and Webb 2006a: 318) are such examples that illustrate the role of historical referencing in forming place attachments. It appears that the residents of these compounds were unaffected by the re-arrangement of settlement space based on a more formal layout and it is likely that they would have played some role in overseeing inter household negotiations and competition. How is then inter generational transmission becomes possible and maintained for nearly 400 years as in the case of the abovementioned compounds?

Two aspects observed in the archaeological record are relevant here. Firstly, the increased privacy of compounds (from Phase C-D onwards) by means of controlled accesses and inner courtyards has implications for the creation of relationships of incorporation and exclusion (D. Bailey 2000). Within this architectural layout members of the extended family would have had the opportunity to interact with each other and to form close relationships in a spatial environment that excludes others and promote group cohesion. In this manner

shared identities would have formed which would be form the basis of the socialisation of new members such as children and spouses into the mnemonic frameworks of family history (Halbwachs 1950). Consequently, the transmission of names, stories and events of the lineage history would have deemed important and would have been rehearsed frequently within the spatial and symbolic boundaries of the compound.

The second element that illustrates a crucial contributing factor in processes of transmission is observed in the curate behaviour that has depleted the archaeological record, as discussed in the contextual analysis. Webb has discussed the processes of discard and curate behaviour based on the distinction between expedient and curated items recovered from accumulation episodes. In her study of breakage rates and fracture patterns of the artefactual assemblage at Marki, she has shown how recycling behaviour and notions of functional expediency can shed light on the depleted systemic inventories that is observed at Marki and at other Bronze Age sites. Hence, curated objects are maintained for the duration of their use-life whilst expedient tools are subject to more opportunistic discard behaviour and have been used for shorter periods of time (Webb 1998, 1999). Curation and expediency can thus be seen as mechanisms to maximise efficiency. Pre-planned abandonment, anticipated prolonged habitation in the same locale and inclusion of objects into burial assemblages are other factors that would have depleted the systemic context (Webb 1995). Going beyond the cost-effective relationship between consumers and objects, the curation of material culture has also implications for the process of transmission and cultural reproduction. Objects that are curated as heirlooms for example, are circulated in society for longer periods of time giving members of the group the opportunity to memorialise and transmit the historical associations and meanings attached to specific forms of material culture (Rowlands 1993). This is a radical departure from the Late Neolithic and Chalcolithic traditions where social reproduction was based on rendering materials inalienable by symbolically destroying and forgetting their 'ownership' (Weiner 1992, Rowlands 1993) and has implications for understanding the formation of social memory in non literate societies.

Chapter 8

A Selective Review of Replication Patterns in Early Prehistoric Cyprus

8.1 Introduction

In this chapter further comparative evidence from selected sites is discussed. At this more general level of analysis, the focus is on the patterns of house replication and on an assessment of the observed longevity, continuity, disjuncture or dislocation within these communities. The first two sections present evidence for house replacement from, firstly two Neolithic sites that are sufficiently published to allow inter site comparisons and then by discussing some aspects of long-term memory in the landscape of Kissonerga region. The last section in this chapter presents a brief account of the long-term continuities and discontinuities of the chronological periods in question providing a wider context for the case studies, discussed here and in chapters 6 and 7.

8.2 Examples of house replacement practices in the Neolithic

The Late Aceramic settlement of **Khirokitia** has been extensively excavated, first by Dikaios, between 1936-1946, and subsequently, since 1977, by a French team led by le Brun. Both excavators have produced detailed final reports (Dikaios 1953, le Brun *et al.* 1981, 1984, 1994). The more recent excavations, are still in progress, hence not all the earliest levels within buildings were reached, whereas Dikaios (1953) paid particular attention in completing vertical excavation in most units, giving us a better picture of the emerging house histories on particular locations. The site is located on the top and steep slopes of a hill, 6 km inland from the southern central coast and very close to the site of *Tenta* (figs. 47, 74). Like *Tenta* and other Aceramic sites on the island, it is surrounded by a circuit stone wall. Dikaios initially interpreted the wall as a road connecting the two contemporary sectors of the settlement. He identified three phases of occupation (I-III) in which buildings were built in either side of the road. More recently though, Le Brun has established on the basis of stratigraphic

associations and radiocarbon dating that the eastern sector represents the initial settlement within the boundaries of the outer wall, whilst the remains in the western sector are later elements of an expanded and displaced occupation outside the initial boundaries (figs. 21-22). In addition, Le Brun's interpretation of the linear feature as a boundary or defensive wall, rather than a road, was based on the discovery, in Zone D, of a gateway (Le Brun *et al* 1994: 33-47). The wall was rebuilt as the settlement expanded to the West Sector (Le Brun *et al* 1994: 15-25). Le Brun's reconstruction of the settlement's history of occupation is based on the distinction of six phases in the earlier east sector (G-A). Contemporary with or soon after phase A the settlement expanded into the West Sector where four phases were identified (IV-I) (Le Brun *et al* 1994). Dikaios excavations, however, remain of value since, as was mentioned, his excavations penetrated the earliest levels of occupation the identification of which is crucial for the study of house histories on the site. The following account, hence, presents the evidence for house replacement from Dikaios' excavations, where more early levels were located⁶⁵.

Tracing house ancestry at Khirokitia presents us with a considerably clearer picture in the sense of the regularity of the patterns that characterise house replacement strategies; although not uniformity or 'repeated' plans. The cultural 'rules' that guided house replacement on the same location as well as the superimposition of multiple floors within the same structure, sometimes as many as 12 to 17 in some cases (e.g. Tholoi IA, III, XV) would have, thus, been more widely accepted and practiced at Khirokitia than at *Tenta* or the contemporary with Khirokitia *Cape Andreas Kastros* (Le Brun 1981). It has to be noted, however, that this concerns the general idea of 'ancestry' and 'lineage' in house construction rather than the specifics of 'remembering' the exact positions of spatial arrangements within superimposed floors or buildings. Instead, there is considerable variability in the way each domestic group would 'conform' to a house ancestry ideal, if indeed there was such.

Le Brun has interpreted the clusters of buildings facing a common open courtyard as representing the typical domestic arrangement in the Neolithic. He associates the fragmentation of domestic space of these compounds into a number of smaller structures with communal open spaces, with the existence of several nuclear families belonging to a more complex social grouping such as extended or polygamous families (Le Brun 2002). Moreover, it appears, from the temporal arrangements, seen in the houses and their

⁶⁵ Figures 21-22 show a diagrammatic representation of house superimposition from Le Brun's excavations, providing thus comparative evidence although it is difficult to tie the two projects since they are based on different phasing systems.

accompanying burial sequences that the inhabitants of these dwellings might have thought of themselves as belonging to vertical groups as well, such as lineages (Le Brun 2002). Another aspect of the settlement layout should also be mentioned; the existence of a number of circular structures that although their features and general appearance do not differ from other buildings, they are differentiated by means of their large size and heavy walling. These large 'tholoi', in Dikaios' terminology, possessed central double pillars and concentric outer walls, sometimes three, or in the case of Tholos IA a corridor wall that resembles the architectural complex at *Tenta*.

Khirokitia was continuously occupied for ca. 1000 years. During this period within the confines of both sectors, a number of structures show intense building and rebuilding activity. A general trend is that bigger structures remain in their original form for longer periods of time as opposed to smaller structures. A greater number of renovations associated with resurfacings occur in larger structures and in the later West Sector. Larger buildings with two or sometimes three outer walls and a diameter between 7.50-10m occur in both sectors but they are more numerous and more spacious in the displaced West Sector, also apparent in Zone D (Le Brun's excavations). In terms of their replication types, we note that the larger buildings tend to get rebuilt on the same location, either as 'repeated' or 'enclosed' types while the smaller ones do not seem to follow any pattern. Their walls clearly overlap with the walls of previous structures but at a more random manner. However, there are exceptions to this, especially concerning the smaller structures. Some of them last for a short time before they are abandoned and rebuilt while others (e.g. tholos X) last to the end of the settlement duration with few structural changes.

Despite their uniform appearance and construction materials there is considerable variation and individuality, more readily apparent in the case of the larger structures. In terms of use of space between re-buildings or renovations there is great variability. Spatial arrangements change from floor to floor. In many cases, however, the position of the hearth is repeated in the new floor, even when there are intermediate re-arrangements. In tholos III six of its eight successive floors received the different types of hearth in the same location and in tholos X most of its 17 floors repeated the position of the hearth. Another constant feature the position of which in many cases is repeated concerns the numerous sub-floor burials. 250 individuals have been recovered from both excavations projects, located exclusively in house interiors. Their shallow grave pits are located around the interior perimeter of the walls, at the centre of the floor or between pillars or short partition walls.

After their interment the floor is replastered and in many examples the pits are sealed with a layer of pebbles succeeded by the construction of a hearth immediately over the burials.

Taking the smaller units together with their associated larger structure, which Le Brun regards as representing discrete compounds, we note that not all structures are built, or remodelled at the same time. Le Brun argues that certain structures act as 'pivots' or core units that hold the lineage together (Le Brun 2002: 26-7) while other units belonging to the compound are altered or rebuilt the same way their floors are continuously change; presumably triggered by changes in the composition or the developmental cycle of the group. The role of the three larger structures with corridor-like walls and free-standing pillars that Dikaios identified and the possible further two from the more recent excavations could be perhaps seen with a similar genealogical framework. Although they do not all have the same longevity and clearly some of them are built at a later stage in the life of the settlement (e.g. S111) their size, construction and number of concentric walls differentiate from the other larger buildings. Their similarities with the architectural complex at *Tenta* are also another factor that points to a similar role. A suggestion was made earlier that the latter complex could be seen as an origin house that represents the whole community rather than named individuals or individual groups. If we assume a similar role for the Khirokitia buildings then the fragmentation, which Peltenburg (2004) argues eventually led to fission and dissolution of the settlement becomes apparent.

KHIROKITIA EAST SECTOR (LE BRUN)

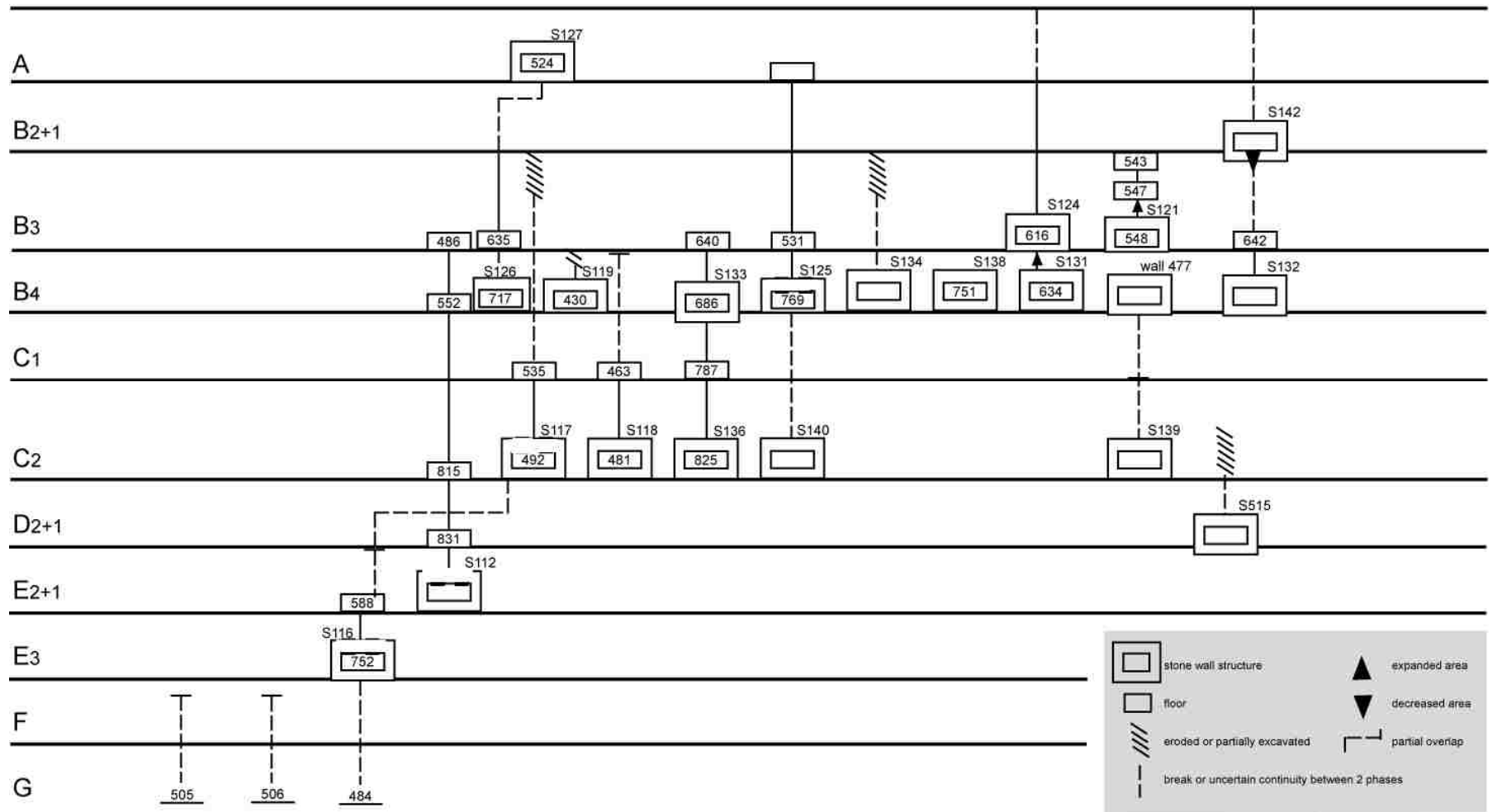
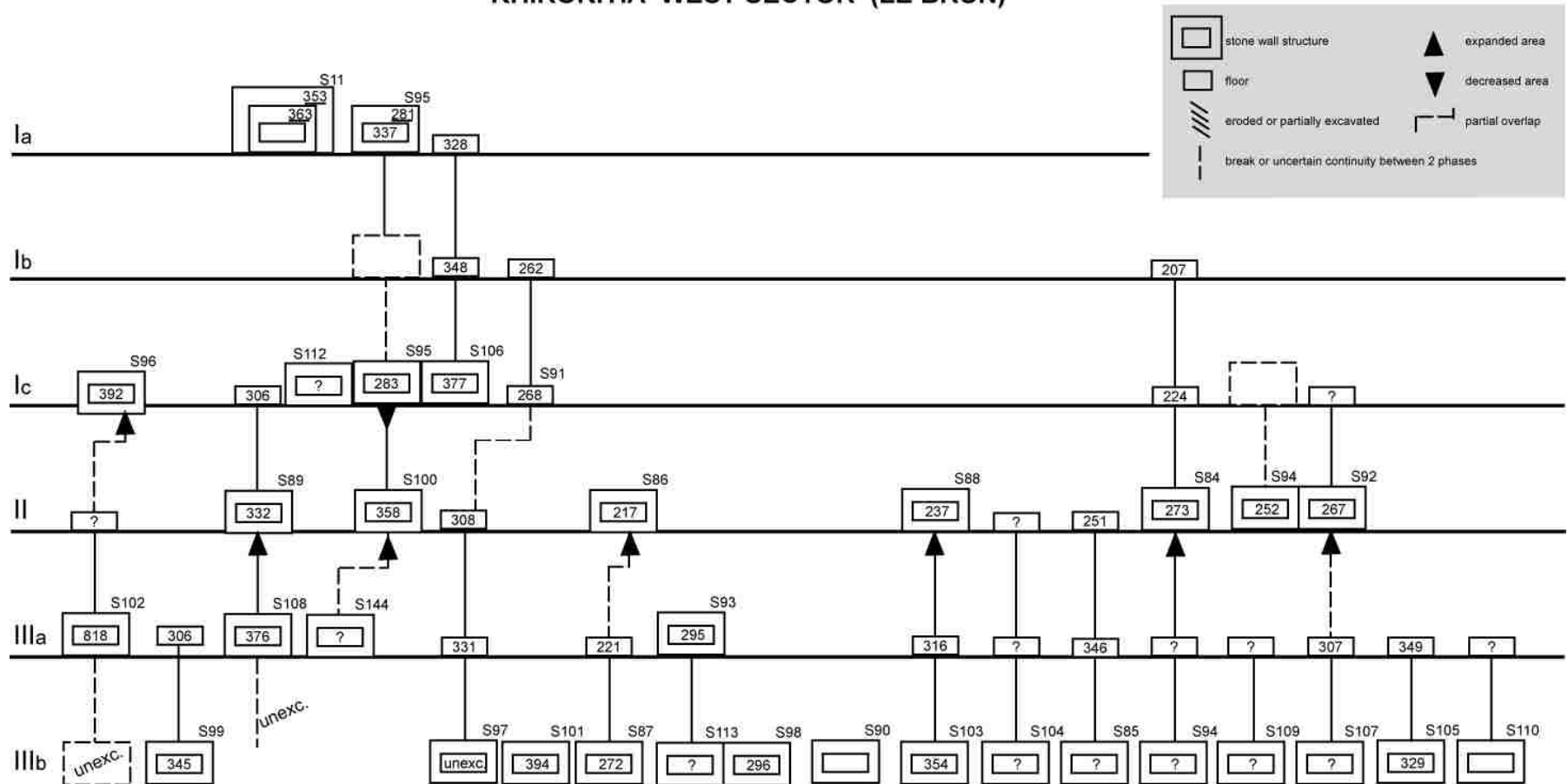


Figure 21. Diagrammatic representation of house replacement and superimposition at Khirokitia-Vounoi East sector (Le Brun excavations)

KHIROKITIA WEST SECTOR (LE BRUN)



IV

Figure 22. Diagrammatic representation of house replacement and superimposition at Khirokitia-Vounoi West sector (Le Brun excavations)

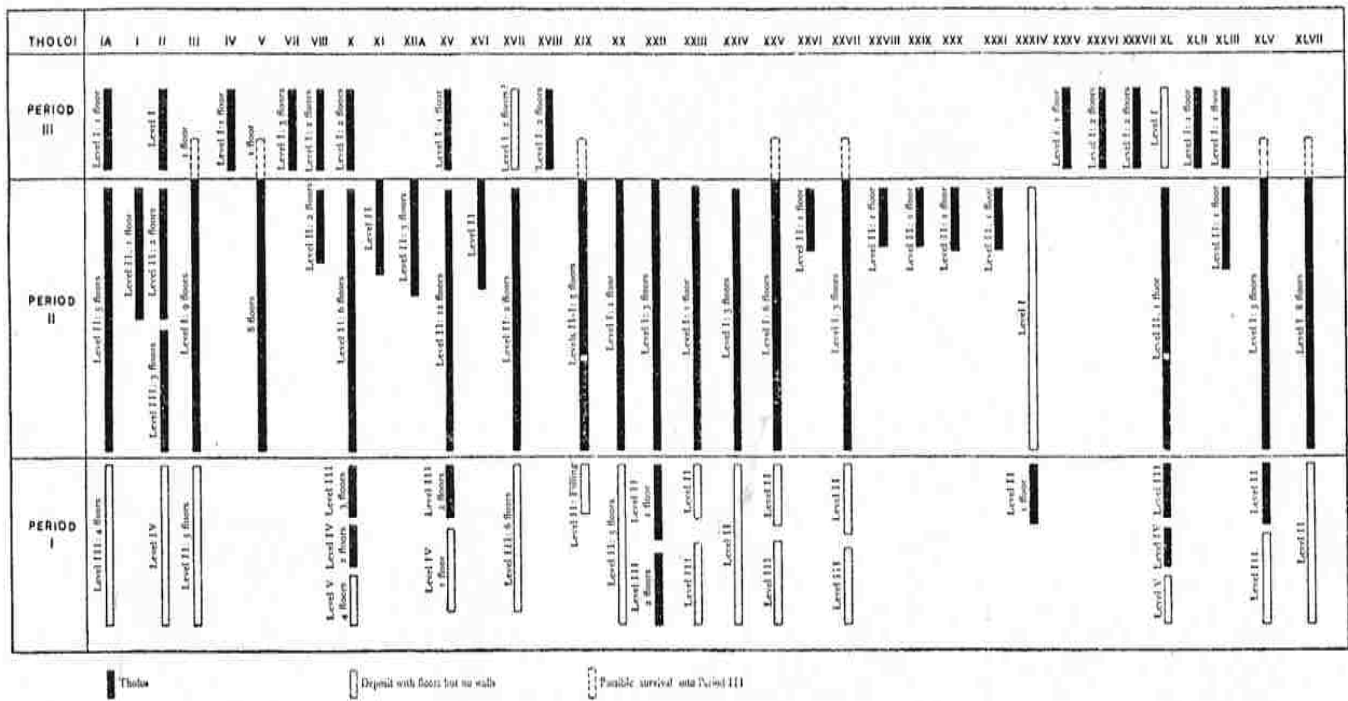


Figure 23. Khirokitia-Vounoi: Diagram showing attribution of Tholoi and levels to periods (Dikaios excavations).

Sotira-Teppes

The fourth millennium BC site of **Sotira-Teppes** was excavated by Dikaios in an extensive exposure between 1947 and 1952 (Dikaios 1961). It belongs to the same cultural horizon as *Vrysi* but it is distinctively different in terms of its layout and topography. The settlement is located on a prominent hill in southern Cyprus and consists of free-standing houses with sometimes adjoining smaller annexes. The contrast between Sotira's architectural configuration and *Vrysi*'s subterranean settlement with restricted space and limited visibility is characteristic of the variable Late Neolithic settlement patterns. Domestic architecture, however, shows as a uniform pattern of construction and use of space. Square with rounded corners house plans, off-centre platform hearths, low partition walls and a number of installations are present in most houses (Dikaios 1961).

At Sotira architectural remains were uncovered just below the present ground surface, founded in bedrock which was visible at places. No more than one metre stratigraphy was noted at any part of the exposure (Stanley Price: 1979c: 49). Dikaios (1961) identified three site-wide horizons, distinguished by two major destructions, the first caused by a fire, the second by an earthquake, both affecting the entire settlement. No breaks in occupation were noted, instead, during Phase II, the debris of the conflagration which ended Phase I, was levelled and new houses were built on the burnt levels of Phase I destroyed dwellings (figs. 24, 57). Despite the continuous occupation, however, and the extensive or partial rebuildings, after each destruction, 'repeated' houses that span the entire duration of the settlement's history are rare. Continuity, however, is suggested by the building of cross-walls adjoining a number of smaller buildings that Dikaios interprets as annexes to the main buildings. The renovated houses in Ph. III appear to have been reconstructed in a less systematic fashion than in the previous disaster by fire. A retaining wall was constructed by placing all the stones from the debris along the north edge of the settlement, consolidating at the same time the northern slopes which had been badly affected by earthquake. Their roofs are of lighter construction which led Dikaios to conclude that they were reconstructed in a haphazard way and they were not as solidly built as the earlier buildings.

In particular, of the 47 buildings that were excavated and of the six that date from the earliest phase of occupation (Phase I), none survive all three horizons (see fig. 24, 57). However, there is some overlapping between successive structures in the northernmost area. H13a was built during Phase II after the conflagration that destroyed most buildings on the plateau with its walls intersecting the walls of the earlier row of contiguous structures in the

northernmost area. In the following phase H13 was built following the same alignment as its predecessors but with a considerably enlarged area. The second case of continuity is evident in the re-building of H14 and 36 in Phase III. House 37 is the only 'repeated' type on the site with its walls following closely the alignment of the previous building (H14) but expanding slightly its area to the south. In its west a series of overlapping buildings were succeeded one another.

The characteristic replication pattern at Sotira is the 'displaced' type and its sub-type 'displaced/continued' where in an accretive manner structures are added to them. Hence, at Sotira, continuity is demonstrated horizontally rather than vertically as at *Vrysi*. After earthquake in Ph. II most houses were reconstructed. Their superstructure was replaced while others survived the fire and were re-used with minor renovations. Where there is evidence for renovations by way of floor horizons, there is some form of continuity in the use of space, especially in the position of the hearth and the partitioned corner rooms.

In a re-interpretation of the site stratigraphy and artefacts' distribution Stanley-Price (1979c) has offered a phasing sequence for Sotira that emphasises continuity in a different manner. He recognised, like Dikaios, the existence of several complexes, each complex consisting of a main structure and a number of annexes, serving according to Dikaios specialised functions, such as kitchens, workshops etc. In his analysis he addressed the problem of reconstructing the lapse of time between the building of the main buildings and their added annexes. According to this assigning of the excavated buildings to phases he argued that the method of settlement expansion on the plateau involved the foundation of structures that were the 'cores' of the household and by adding to them smaller adjoining or free-standing structures. This according to Stanley-Price was done in a regular manner rather than randomly building structures where there was free space. Hence, a number of structures comprising complexes had developed from a single founder structure to a cluster implying that each founding building would have certain spaces reserved for their subsequent expansion.

Sotira - Teppes (DiKaios 1961)

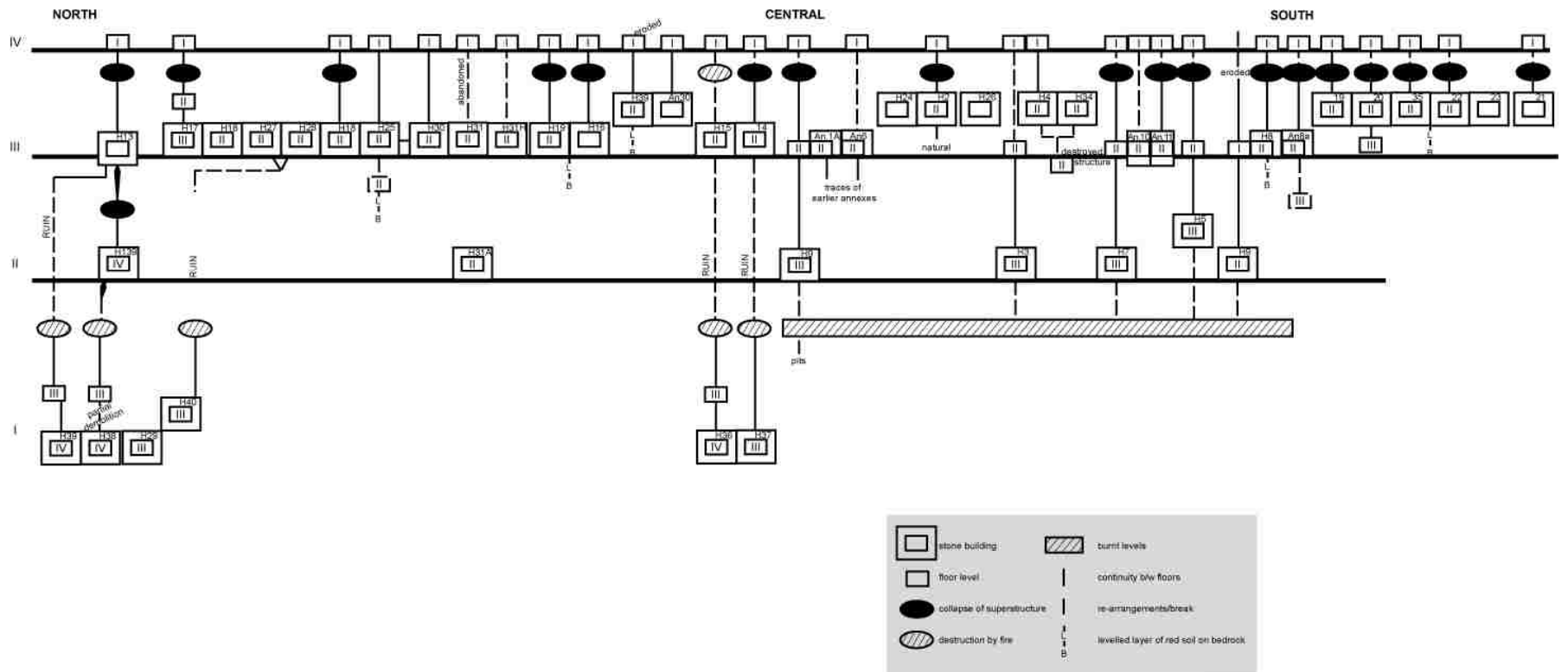


Figure 24. Diagrammatic representation of Sotira-Teppes house stratigraphy (following DiKaios' phasing).

8.3.2 An example of long-term memory in the Chalcolithic Landscape

In chapter 8 Kissonerga-*Mosphilia* was discussed in detail with regard to the development of the community from period 2 to period 4 to which all of the upstanding architecture is dated. As it was mentioned the history of occupation on the site is much longer and spans over three millennia, although it is not known whether this would have been continuous or interrupted by a number of relocations; given the known lacunae in the Cypriot settlement record the latter is more likely. In any case, the fact that artefact scatters give an estimate of a 12 ha utilisation of the landscape, this could be an opportunity to study how and whether people were aware of previous inhabitation and how they would have chosen to consciously reference or ignore the past. This could have been conducted in formalised or ritual way or unconsciously or even accidentally in the course of everyday activities. In other words in what sense such a long, even if not continuous occupation triggered the recall of memories about the distant or less remote past to people who inhabited that landscape at any give time. Many archaeologists have shown interest in this kind of questions in recent years, especially in European prehistory. In prehistoric Cypriot archaeology, especially concerning the pre-Late Bronze Age period, such questions have not systematically been addressed. However, this does not necessarily stem from the lack of theoretical frameworks or willingness to deal with issues in connection to the re-use of the landscape. The lack of monuments and the low visibility of prehistoric sites in certain periods as well as the resulting lacunae in Cypriot settlement record would pose a serious hindrance to such projects. Moreover, the shallow deposits that have been observed in the stratigraphy of most prehistoric sites means that other action of inscription on the landscape, such as fields systems, do not survive.

Another way to reflect on how people encountered and treated the material remnants of the past has been proposed by Bradley (2002) as mentioned earlier and concerns activities such as digging pits and ditches, creating in the process mixed or redeposited assemblages. Excavation terminology and stratigraphy do not allow room for these issues to be addressed since by definition, mixed, disturbed or contaminated deposits or assemblages that are not *in situ* but are re-deposited, derived, residual, or intrusive have little or contextual integrity and are of no use for dating purposes. Bradley argues that it is exactly in such deposits that we would find instances of material encounters with the past and awareness, if not acknowledgement of history ((Bradley 2002: 153-157). This awareness

would be, no doubt, crucial in establishing people's attachment to and ties with a place, occupied for such a long time. As a way of a limited in scope methodological exercise I consider below the evidence from the earlier periods of utilisation of the site.

The earlier evidence for occupation of the site is attested in Period 1A, which is attributed to the Late Aceramic Neolithic. A single radiocarbon determination from a large hollow in the Upper Area provides a date at around 6,000 BC (see table 16), which fits within the known range for this period (Knapp, Held and Manning 1994: 382-5). Period 1A remains were located at *Mosphilia*, only in the Upper Terrace and they are all in the form of negative features. These pits are attributed to the Late Aceramic Period on the basis of a radiocarbon date from the base of pit complex 1667. The complex was interpreted as a quarry that was re-used, while it was open, for other purposes, such as cooking on the evidence of an earth oven dug at its base (Peltenburg *et al* 1998: 16-7). It is possible that this re-usage took place during the next occupation in Period 2, around the mid fourth millennium BC, since the chronological assessment of the contents of pit complex 1669 fills is problematic and they cannot be all attributed, stylistically, to the Late Aceramic Period with absolute certainty. Fragments of stone bowls were made of chalk, instead of the preferred Aceramic diabase but this might just represent a regional industry instead of a late element (Elliot in Peltenburg *et al* 1998: 179-80). The chipped stone from the pits exhibits characteristics that are not in agreement with the known Early Chalcolithic industry and generally supports the attribution of the pits to Late Aceramic Period. However, a female figurine made of marly chalk, seems to be a classic example of Chalcolithic stone figurines (Goring in Peltenburg *et al* 1998: 160). In summary, the excavators do not deny the possibility that the contents were derived and that the complex might represent Early Chalcolithic activity within a hollow that was initially cut in the Late Aceramic period, as the radiocarbon date suggests, or that alternatively the objects are derived from and mixed with Period 2 activities that took place in the same area or even later when grave 571 cut into earlier deposits. In other words, intensive pitting in that area over a prolonged period, from around 6,000 BC until the late fourth millennium BC, as well as modern disturbance and erosion resulted in a very mixed assemblage, as is the case in various other contexts in the site. For example, other Late Aceramic material was also found in later deposits, as late as in Period 4 occupation, which is dated to the first half of the third millennium BC, including obsidian, figurines, stone bowls and ornaments. This, however, should not distract us from the fact that, in any case, this is a prime example of how people

would encounter artefacts and activities that originated in the past, although we cannot know the beliefs held about the exact antiquity of the deposits and the interpretation given to these; the gap of over two millennia between these two periods was not probably acknowledged in the same manner as in Western notions of time.

Looking into how these 'residues' were treated in later periods, an interesting case about contrasting notions of continuity and commemoration could tentatively be made on the limited evidence of three figurines, two of possible Late Aceramic origin and one in Late Aceramic Neolithic context, found re-deposited in or mixed with later contexts. Chalcolithic figurine KM3597 was found in the abovementioned pit complex 1667. The female figurine was broken at the time of its deposition, its head and left side missing, bisected vertically with the genital area severed. It was deposited with other broken objects, including 19 stone bowls, some with evidence of red paint, chipped stone, stone jars, a perforated disc and two pounders, some of which belong to Period 2 activities and some, as it was mentioned, to earlier by two millennia period 1A. This is a very mixed assemblage and it would appear to be the result of discard behaviour. Structured deposition refers to highly formalised ritual activities but structured deposition also denotes symbolic behaviour and as Hill (1995) has argued all human activities are the result of symbolically structured, according to cultural norms, behaviour. Structured deposition, thus, includes discard behaviour as well as unreflective acts of deposition and we should not expect to always find 'clean', deposits to infer symbolic behaviour (Hill 1995: 96) nor should we expect all such contexts to point to a formalised ceremony, accepted and practiced by all. On the basis on the figurine's form, intentional damage, contextual associations and possible symbolic significance of the figure, it could be suggested that this act might represent a deliberate 'death' of the figure in a feature or a location that might have been perceived by the new inhabitants of the site as belonging to an ancestral occupation. Female figurines proliferated in Early and Middle Chalcolithic periods and have been associated with reproductive rituals (Bolger 1992, 1996, 2003) as well as with closure ceremonies (Peltenburg *et al* 1991). Defacement and damage of objects prior to their 'burial' is attested in period 3B ceremonial area, as was discussed in the previous chapter. The second example is figurine KM1387. It is attributed to the Late Aceramic period on the basis of its similarities in form and material with other Late

Aceramic figurines (Peltenburg *et al* 1998: 22).⁶⁶ Its context is from surface deposits, hence we cannot make any further inferences, apart from noting that unless it comes from a disturbed pit or burial, it would have been in circulation. The third example, KM 2605 was recovered from a period 4 pit in B1165, a mixed deposit for which we have no other information apart from its contents that included a rubbing stone and a bone implement.

If these examples are representative of how people in the past would have encountered 'ancient' objects in their everyday activities then the above cases illustrate the differential attitudes to the landscape's perceived antiquity. However, this has to remain a conjecture and the evidence I have presented is not sufficient to address these issues any further, if at all. But it highlights the need to consider these matters in future excavations on their own right rather than ignoring their potential for different kind of questions. The excavation project at *Mosphilia* acknowledged the importance of recognising re-deposited pottery in multi-period sites and the resulting distortions to the sequence that failure to identify these patterns create. Bolger conducted abrasion analysis of pottery from pit fills, structural components of buildings or mixed building fills and her results show a high level of abrasion and re-deposition from these contexts. However, her analysis is restricted to the value of these measures for a more secure ceramic periodisation (Bolger in Peltenburg *et al* 1998: 103-104).

8.3 The Cypriot Settlement Record: Origins and Transitions

Two recurring themes in Cypriot archaeology have shaped our understanding of the island's prehistory and to a large extent have characterised prehistoric occupation; site dislocation and migration. Both bear on the subject of continuity and discontinuity that are of interest here. Hence, the period of nearly five millennia (from the early 9th to the late 4th millennium BC) that comprises the Neolithic era in Cyprus is nowhere continuously attested in the form of unbroken stratigraphic sequences. The excavation and dating of Early Aceramic sites, such as *Parekklisha-Shillourokampos* (Guilaine *et al* 2000, Guilaine and Briois 2001), *Kissonerga-Myllouthkia* (Peltenburg *et al* 2000, 2001b, 2003), and *Akanthou-Arkosyko* (Şevketoğlu, M. 2002), together with the revised dating of *Kalavassos-Tenta* (Todd 2005,

⁶⁶ Note, however, that E. Goring who studied the figurines does not comment on its date and she considers it with Period 4 objects, although she notes that it could have been earlier, because the context is not secure (Goring in Peltenburg *et al* 1998: 149, table 6.2)

Peltenburg *et al* 2001a) have considerably narrowed the gap between the Akrotiri phase and the better known Late Aceramic (Khirkitian) phase. Recent research on the above and on other, even earlier, sites have reopened the discussion about colonisation processes and the nature of the formative phases of social organisation and settlement on the island (Simmons *et al* 1999, Ammerman and Stratton-Noller 2005, papers in Peltenburg and Wasse 2004, Guilaine and Le Brun 2003, Swiny 2001). These developments have significantly altered our understanding not only of the initial settlement of Cyprus but also of the succeeding Khirkitian period. The latter cultural horizon, with its many distinct characteristics, now appears to have been a local development and adaptation, corroborating Dikaios' (1962) 'antecedent hypothesis' (also Watkins 1973, *cf* Watkins 2004); rather than seen as exhibiting archaic elements when compared to the mainland as the result of either the island's isolation or the loss of cultural traits in transmission (Catling 1970, Stanley-Price 1977a, b, *cf* Held 1989).

In the ensuing phases within the Early Aceramic Neolithic, after the initial permanent settlement,⁶⁷ contacts with the mainland would have been maintained, as is evident from the lithic industries and architectural record from this period (e.g. *Tenta 5*, *Shillourokambos A/B*, and *Mylouthkia 1A*). The cultural influence of and the contacts with the mainland gradually decreased, although this was a process of slow assimilation and it is to be attributed to the decision of the islanders to assert local identities rather than a direct or sudden effect of cultural and geographical isolation (McCartney 2004, 2006, Le Brun 2005, Broodbank 2000). By the mid sixth millennium BC island identities had found expression in a variety of material media and ideational domains, as the evidence suggests from sites such as Khirkitia. Nevertheless, this long process was highly selective and its mechanisms of transmission and retention are poorly understood. Hence, in some aspects of material culture we find elements of continuity and tradition as in architecture and the retention of the circular, heavy walled house plan; while in others, like in the stone vessel, chipped stone industry, as well as in burial practices and representational art, the cultural and temporal divergences are more apparent (Le Brun 2005).

Various models have been forwards to explain the abandonment of the large, well-established Late Aceramic sites, sometime in the mid- 5th millennium BC; the ensuing *lacuna*

⁶⁷ At present the date for the establishment of sedentary or semi sedentary communities on the island is placed in the Early Aceramic period contemporary with the PPNB in the Levant. Doubts have been casted as to whether these sites represent the landfall settlements or simply the state the current research on the island (Watkins 2004).

in the cultural sequence of approximately 500 years; and the subsequent appearance of communities that possessed advanced knowledge of ceramic technology and built rectilinear houses; but with little or no real archaeological evidence. The abandonment of the Late Aceramic sites such as Khirokitia has been attributed to environmental degradation, resource stress and depopulation, or to internal socio-economic factors such as social fragmentation and return to more ephemeral settlement configurations (e.g. Cherry 1981, Catling 1962, Peltenburg 1982a, Held 1993, Peltenburg *et al* 2003: ch. 24). The subsequent establishment of a number of newly founded sites with stone rectilinear architecture and pottery has been seen as the result of a 'booster migration' (Held 1989, 1992). As an alternative to a depopulation and migration theory, the possibility that smaller scale communities with different social organisation might have founded settlements that are of low archaeological visibility has also been drawn attention to (Peltenburg 2004: 86).

A number of Ceramic Neolithic sites were established in new ground like in the case of Sotira-*Teppes* (hereafter Sotira) and Kantou-*Kouphovounos* (Matzourani 1994, 1996) on the southern coast, while others were founded in previously occupied areas as in the case of the Ceramic Neolithic occupation at Khirokitia and *Tenta*. It is not possible to know whether these settlers would have been attracted to these areas because of their visible ruins and circuit walls, or the knowledge of ancestral lands in the area would have been passed down from generation to generation. The latter seems unlikely if we consider the 600 year gap between the two occupations. In either case, there is nothing in the admittedly limited and poorly preserved archaeological evidence to suggest that such associations would have been known to the Ceramic Neolithic settlers. At *Tenta* for instance, the upper levels were severely eroded and no architectural remains were located dated from this period. All the Late Neolithic and Early Chalcolithic ceramics were found redeposited in eroded pits in the southern flanks of the hill (Todd 1987, Baird in Todd 2005). The example of the Vasilikos Valley Area is informative about the next transition, between the Late Neolithic and Early Chalcolithic period. The predominant settlement pattern was one of short distance settlement shift. Baird's ceramic analysis of the *Tenta* assemblage showed that the latter represents an intervening occupation between Early Chalcolithic Kalavassos *Ayious 1* and *Ayious 2* (Baird in Todd 2005: 172) in which case the Late Neolithic/Early Chalcolithic transition was continuous, albeit horizontally rather than vertically.

In other areas on the island such continuity is more difficult to demonstrate and the reasons for the abandonment and/or dislocation of Late Neolithic sites are not well

understood. Dikaios argued that a catastrophic earthquake was the cause for the abandonment of the settlement at Sotira (Dikaios 1961) where a squatter occupation and settlement 'entrenchment' then ensued (Held quoted in Peltenburg *et al* 2003: 257). The difficulties in recognising continuity thus, with regard to the transition from the Late Neolithic to the Early Chalcolithic, is the low visibility of the settlement configuration of the latter; evident in other sites that have yielded confirmation for uninterrupted occupation such as at *Vrysi* (Peltenburg and Spanou 1999) and *Kissonerga-Mylothkia* (Peltenburg *et al* 2003). Consequently the evidence for house replacement strategies and place attachment is rather limited from this period; save for *Erimi-Pamboules* which in 5.5m deep stratigraphy produced evidence for the superimposition of timber followed by stone buildings (Dikaios 1936).

By the Middle Chalcolithic period large sites with curvilinear stone architecture had been established in some cases within Early Chalcolithic landscapes such as *Mosphilia* and *Kissonerga-Mylothkia*. The characteristic settlement pattern in this period which lasted for almost a millennium was horizontal displacement and clustering, which is attested island-wide. Held has argued that the development of such local, either successive or overlapping clusters of sites, would have been advantageous from an ecological point of view, providing communities with new farming territories in familiar catchment areas (Held 1993: 28). On the other hand, as argued in the previous chapter, it would have affected inter generational transmission and would have prevented material attachments to the particular landscapes and vertical relationships, based on descent and genealogy.

The final transition that is of interest to the chronological scope of this thesis concerns the settlement patterns in the mid third millennium BC and in particular the transition from the Late Chalcolithic to the *Philia facies* of the Early Cypriot period (table 15). Until recently, most of the evidence for this transition derived from tomb groups such as at *Lapithos-Vrysi tou Barba* and *Vounous-Bellapais*. The specifics of the chronological sequence and the difficulties that resulted from a rigid and overclassified periodisation of the ceramic material have been discussed in detail elsewhere (Knapp *et al* 1994, Stanley-Price 1979b). A distinctive material culture, intrusive to Late Chalcolithic cultural characteristics is attributed to an initial migration of extended family groups from Anatolia and their subsequent establishment on the island; the exploitation of Cyprus' abundant copper resources being a major attraction (Frankel *et al* 1995, 1996, Webb and Frankel 1999, also Mellink 1991, Catling 1971). Amongst other explanations that have been put forward include

indigenous developments; associated with an emergent elite who emulated Anatolian prestige symbols as well as technological innovations and new farming methods characteristic of the Secondary Products Revolution (Sherratt 1981) as a way of asserting their status and establishing their power (Manning 1993, Knapp 1993). Frankel (2000) has recently argued that the *Philia facies* do not just represent chronological periods or stages but real ethnic groups which brought to the island a new *habitus* associated with all aspects of everyday practice, from motor skills to artefacts types, rituals and technologies. Migrants were gradually adapted to their new environment, they were 'enculturated' while the peaceful interaction with the Chalcolithic inhabitants led to the transformation and acculturation of the latter, in 'becoming Bronze Age' (Frankel 2005: 19). During the initial stages of these processes, a common language was being established whereby a common ideology and distinct identity markers are attested across the island. The mechanics of these interactions and mutual influences are not fully attested archaeologically. Stratified material from settlements such as *Mosphilia*, derives mainly from plough disturbed deposits whilst the other known from excavation *Philia* settlement, that of Marki is dated to the later more established phases of *Philia* (Webb and Frankel 2006a: 306).

By the ECI, major settlement dislocation had occurred. New sites had been found in areas near copper resources. Population expansion, an increase in the number of sites, concentrated in clusters along the north-western foothills of Troodos and a marked regionalism are traits of the EC-MC occupation (Swiny 1989). The established architectural configuration differed markedly from the Chalcolithic round house and settlement layout was now influenced by the accretive multi-room architecture of residential compounds, like those that we saw at Marki. Although it is not the case anymore that the EC-MC is known exclusively from cemetery contexts, the short duration of most excavated settlements, apart from Marki, do not offer any further insights into house replacement practices. The EC settlement at Sotira-Kamminoudhia has produced evidence for two phases of occupation from a sounding into Unit 2 (Swiny 2003: 10-14). These are likely to represent episodes of remodelling like at Marki although not at the same scale. The abovementioned unit was probably an open space during Phase I while in Phase II it was plastered over, its entrance was blocked and relocated and it was divided into two rooms. No substantial evidence from other settlements exists for continuity of house location or multiple rebuilding phases apart for limited exposures at *Kalopsidha-Asproyi* and *Tsaoudhi Chiflik* (Åström 1966) where demolition of walls and rebuilding at a different alignment was attested.

8.5 Conclusions

Although *repeated practices* that involved the transmission of the past through the continuity of the house are known from the Neolithic, Chalcolithic and Early/Middle Bronze Age, these sites, these are neither universal nor continuous. Whilst in some Aceramic Neolithic sites like Khirokitia-Vounoi the house has a deep history and clearly acts as mnemonic for successive generations, with multiple floors, remarkable longevity and intra-mural burial sequences, in others the evidence for material continuity and commemoration is less explicit or at least less well preserved, like at Rizokarpaso-Cape Andreas Kastros (Le Brun *et al.* 1981) or Limnitis-Petra tou Limniti. Variability in replication patterns, however, is more pronounced in the Ceramic Neolithic period, that ranges from vertical superimposition (*Vrysi*) to a combination of horizontal displacement and vertical continuity, as at Sotira-*Teppes* (Dikaios 1961) and Kantou-Kouphovounos (Matzourani 1994, 1996) to ephemeral occupation in pit houses, such as those at Kalavastos-Pamboules (Dikaios 1962) or the negative features at Philia-*Drakos A* (Watkins 1969, 1970, 1971). Whether the marked contrast between Late Aceramic and Ceramic Neolithic house histories could be explained as merely the result of topographical factors, chronological discontinuities or poor archaeological visibility (see Peltenburg 2003: or whether these differences reveal differential attitudes to ‘place-making’ and being part of the landscape, in the past, is a subject that deserves further research.

Finally, the discontinuities of the Cypriot settlement record pose a real problem and hindrance to our understanding of the long-term continuities across prehistoric landscapes. While issues of preservation, low visibility, ecological factors and social fragmentation have to be further addressed in excavation and survey to elucidate the archaeological sequence we should also keep in mind that people in antiquity would not have had an understating of a ‘finished’ sequence either. Their awareness of the past would have been selective, like ours, and open to many interpretations (Ingold 1993). A fruitful approach would be to revisit the evidence for long term continuities and discontinuities with the underlying aim, not of filling the gaps, but of understanding the variable ways that history would have been perceived by people in the past.

CHAPTER 9

What Time is This Place?

Conclusions

'Do the houses in themselves hold any guarantee that *dwelling* occurs in them?

Martin Heidegger (cited in Ingold 1995b: 75)

9.1 Introduction

In a recent article, Joyce and Hendon have argued that materiality plays an important part in 'transforming fleeting identities into historical facts' (Joyce and Hendon 2000: 143). In their analysis of Mesoamerican archaeological sites, they show how architecture can be used by social actors to 'write different forms of community into the landscape'; ranging from the intimate spaces of houses to the hegemonic scales of ritual performances in the exterior spaces of the plazas (Joyce and Hendon 2000: 154-5). Such permanent markers of space are akin to Connerton's (1989) concept of inscription. Monuments are the most obvious category of such intelligible writing on the landscape. They render the associations with the past visible and relevant for generations to come. Even if the original meanings attached to their form are bound to be reinterpreted by successive generations (Bradley 1998) their mnemonic efficiency and authority will have a longer 'life-span' before they are re-invented than, for example oral narrative and memorisation. Memorial architecture, however, need not be monumental and it was shown in this research how houses not only 'contain' the past but are in themselves biographical objects.

On the other end in the spectrum of mnemonic practices are less distinct or visual media that create rather different forms of memory. These are ephemeral monuments; material objects that are destroyed or left to decay, yet becoming powerful memorials in their very absence, creating the paradoxical, for Western memorial traditions, situation of 'remembering by forgetting' (Kühler 1987, 1988, Battaglia 1992). Many writers have used

these two opposing notions to commend on the domination of the Western memorial model that depends upon visual imagery and material statements (Forty and Kühler 1999, Kühler and Melion 1991, Rowlands 1993, Lane 2005). The Malangan sculptures are often cited as examples of ephemeral monuments that record time in a qualitative different way than the materiality of monuments or the permanence and visual imagery of heirlooms (Kühler 1988). The cultural material that was explored in this thesis dealt with both forms of memory illustrating variability in the ways different media were used to bring the past into the present.

In the preceding chapters I have concentrated on the evidence from selected case studies from early prehistoric Cyprus in relation to the different ways that people might have actively or routinely referenced the past, through *repeated practices*, mainly associated with the house. The study of replication patterns and the sequences of houses in the settlement contexts that were explored reveal a great diversity in the ways different communities at different times appeared to have produced individual senses of *place* and *history*. For example, at times different groups appear to have commemorated a line of 'house ancestry', such as in the examples from *Tenta*, *Khirokitia*, *Vrysi* or *Marki*; and yet at others to have attempted to conceal the 'living history' of the house and its genealogy, like the ritual destructions in some houses at *Mosphilia* or *Vrysi*; at others to have been consistently displaced, like the settlement relocations at *Sotira*, *Lemba* and *Mosphilia*; or simply to have 'forgotten' previous arrangements, like some of the refurbishments between successive houses at *Vrysi* or the overlapping of walls at *Mosphilia* or the constantly re-arranged interior and exterior spaces at *Marki*. In several cases all of the above might be identified in a single community or chronological period. I have attempted to illustrate this variability, methodologically, in the multiple scales of resolution that I have conducted the research, from the details found in the sequences of individual episodes, fills and contexts, to the coarser superimposition of house plans and the study of their replication patterns diachronically.

One conclusion that this study has arrived at is the impossibilities in attempting to discover 'patterns' associated with specific periods or specific settlements. This is potentially meaningful in itself illustrating the existence of memory networks that relied on informal commemoration and story telling (Tringham 2002) rather than formalised versions of group history. Nevertheless, it remains the case that continuities, disjunctures, negotiation of past meanings and alterations of stories are all part of the dynamic and ever

emergent nature of the process of biography and social reproduction (Pred 1984, Giddens 1979). This is especially the case in communities where integrative facilities and centralised authority were largely absent and where social memory concerned individual or autobiographical events as it was argued for the Chalcolithic (chapter 7).

In this chapter, as a way of reaching for conclusions, I reflect on the contribution of studying space in its temporal dimension can make in archaeological reconstructions and the 'success' of translating the products of excavation into sequences of actions.

9.2 Building *Place* Narratives

The strong relationship between architecture and memory has been long established since classical Antiquity and the *ars memoriae* (Yates 1967). What is more crucial is the fact that this relationship, goes beyond the use of metaphors that describe abstract mental functions. As it was discussed in chapters 3 and 4 there is a fundamental connection between materiality and memory, in the sense that one draws from the other in order to make meaning of the world; past and present. The house, beyond its utilitarian function, provides a 'diagram' for how these meanings are to be understood in specific historical contexts (Wilson 1988). Bourdieu (1990: 76) regards the house as a 'book' and has drawn attention to its space as 'the privileged site of the objectification of the 'generative schemes' that are in operation within a given society and where, in his words:

'the world of objects, a kind of *book* in which each thing speaks metaphorically of all others and from which children learn to read the world, is read with the whole body, in and through the movements and displacements which define the space of the objects as much as they are defined by it.' (Bourdieu 1990: 76-7, emphasis added).

In a similar vein, Bachelard in his *topoanalysis* of the lived house has written about hidden memories and experiences in every room, corner and cupboard (Bachelard 1994). That merging of inanimate materials with minds and bodies within architectural spaces, forming memory networks or according to Gell 'distributed objects' has been illustrated in a number of anthropological examples. Waterson (1990) has shown how the house in South East Asia is regarded as a living body with a 'vital force' or soul that is distributed in the materials of its construction. Hence, some houses are spoken of as having feet (the wall posts), crania (the ridge-beams), bones (rafters of roofs), navels (the central posts), arms, ear rings etc (Waterson 1990 88-89, 129-32). Like people, they are given life-giving rituals when they are

constructed and their death is commemorated according to the same cultural principles as that of humans. Houses go through 'rites of passage' the same way people do.

The idea that the meaning of the house, as a specific and specialised architectural design, goes beyond matters of form, function and shelter has been now widely recognised and documented in archaeological examples; and this has been the starting point of this research. Although criticisms that concepts such as 'place' and 'home' are merely 'buzzwords' (Rapoport In Seamon and Mugerauer 1995: 5), it has been shown in a number of works that this is simply not true. Archaeologists have long recognised the symbolic connotations in the material remains of dwellings. In *The Domestication of Europe* Hodder (1995) has shown how the houses in Neolithic societies were actively used as a metaphor for social strategies by means of symbolic elaboration and control of the outside, the *agrios*. More recently, Bradley (2005) has taken up the subject of the ways the domestic sphere was ritualised in Prehistoric Europe. Watkins (2001) goes even further in arguing that architecture is a powerful mode of visuo-symbolic expression of external symbolic storage and transmission (after Donald 1991). Using examples from the Neolithic Near East he places the house at the heart of the 'symbolic revolution' (Cauvin 2000) and talks about houses that were conceptualised as 'theatres of memory' and as 'embodiments of the shared notions of the dramas played out' in their spaces (Watkins 2001: 17) arguing that early sedentism, both as a cause and effect required new frames of symbolic reference and communication that are found in architecture.

The archaeology of Early Prehistoric Cyprus is equally rich in examples of how the house was symbolically charged and of the multivalent meanings attached to it, not only by its inhabitants, but by the entire community. Indeed, the uncertainties, discussed in previous chapters (ch. 6-8) regarding assigning domestic, ritual or public functions to some 'unusual' structures, but not 'unusual' enough, in the sense of diverging from other domestic forms in a significant way, to warrant separate classification, are characteristic in earlier prehistoric contexts. Some examples include the impressive tholoi of Khirokitia with outer concentric walls, the 'architectural complex' at *Tenta*, the 'Red Building' or the 'Pithos House' at *Mosphilia*, House 1 at Lemba, House 5 at Sotira and probably many more (*cf* Peltenburg 1989). In any case, we have enough evidence, from Cyprus as well as from other parts of the world to argue, that this ambivalence between meaning and form is at the core of non-Western attitudes to and perception of the built form (Waterson 1990, Kirsch 2000).

The architectural expression of domestic buildings has been variously taken up in Cypriot research. Along with more traditional approaches to typology and form (Wright 1992, Schaar 1995), novel experimental reconstructions and methodological contributions (Thomas 1995, Papaconstantinou 2002, 2005, Webb 1995), the social and ritual aspects of houses have recently begun to be explored in more depth. Hence, Frankel (2000, 2005) uses the concept of *habitus* as extrapolated from contexts of daily 'domestic' behaviour, such as cooking, textile making and spatial practices, among others, to explain the differences between and enculturation processes of Late Chalcolithic communities and Anatolian migrants. Recent 'readings' of the architectural evidence from Cypriot prehistory include also patterns of gendered behaviour and kinship structure in the domestic record as opposed to an exclusive focus on gender reflections in representational art (Bolger 2005, Webb 2002, Le Brun 2002). Peltenburg has entertained, in a number of works, the relationship between architecture and the structuring of social relationships (Peltenburg 1993, 1994, 2004). He has also made innovative suggestions about the symbolic aspects of houses and their biographical connection to death rituals (Peltenburg 1989, 1990, 2004, and in Peltenburg *et al* in press: ch. 12).

The contribution that this thesis makes towards the above lines of research, has been by demonstrating in practical contexts, how viewing houses as 'biographical' and 'historical' objects can be achieved, by shifting the focus from horizontal/morphological spatial analysis to vertical sequences; taken to have 'recorded' the passage of linear time in their successive strata along with the various temporalities inherent in the perception of social time in the repeated practices over the course of their life histories and beyond (Gosden and Lock 1998). By revisiting the sequences and series of episodes recorded in the stratigraphy and contextual associations of houses, it was possible to illustrate *instances* in the biographies of dwellings as these interact with the life courses of their inhabitants and to take the opportunity to study, in context, the contribution of house histories towards people's awareness and perception of the past, in the past.

This research has particularly highlighted the following aspects with regard to the procedures and interpretation of how the *repeated practices* that create the biographies of houses are recognised in the archaeological and published record opening avenues for future research.

9.2.1 Vertical Space as Sequences of Actions

The central tenet of the methodology adopted in this thesis has been the study of space as a 'vertical construct' (D. Bailey 1990: 24). Focusing on the succession of various elements within the full sequence of individual houses, has allowed us to understand the temporalities and relationships between the different parts of the house at any given moment/horizon. The starting point was to explore, as closely as the published information allowed us (see chapter 5), the stratigraphic and contextual associations within architectural spaces with the aim of identifying the continuities as well as the discontinuities between successive stages. Special attention was paid to recognising 'persistent' elements in the form of the repetition of certain material correlates of buildings- walls, hearths, surfaces, doors etc.; the longevity of houses; and their replacement or dislocation.

As a methodological procedure, studying the occupation phases through the stratigraphic relationships recorded in excavation is a valid and long established analytical tool. However, it was argued that these 'stages', as described in conventional archaeological language and drawn in sections and stratigraphic matrices are not enough in themselves, if we want to explore the relationship between buildings and the successive generations who inhabited in them. Therefore, 'stages' such as construction, abandonment etc. have to be 'translated' into **sequences of action**, on the prior understanding that these were the outcome of actions by conscious actors. One of the most characteristic examples of the differences between a 'stage' and its 'transformation' into a series of actions, and an often neglected one in archaeological descriptions, is the episode of post-abandonment. It is usually described in terms of the damage or disturbance to what archaeologists consider the most valuable artefact: the floor. Yet, these stages are potentially rich source of information about how individuals and communities would have 'remembered' the material and social aspects of their houses after they were abandoned, ranging from leaving them to decay, making use of their ruins as dumping grounds, dismantling their structural materials that will become active parts in another house, to using the accumulated fills in their shells as burial grounds; all of these practices were identified in the case studies under investigation. The same goes for episodes that either preceded the construction or took place early in the sequence. In other words, for the possibilities of studying vertical space as repeated actions to be realised it is important that excavation is complete, at least vertically, giving equal weight to every stage within the life course of a building.

PARALLEL LIVES : RITES OF PASSAGE- BUILDING SEQUENCES	
BIRTH	Construction
SOCIALISATION	Accumulation Configuration of space, Social roles, gender, power
ADULTHOOD	Accumulation, Renovation
DEATH	Collapse, Destruction, Abandonment
COMMEMORATION	Post abandonment, ritual closure, Decay
ANCESTORS/CONTINUITY	House replacement, place-names, excavation, preservation

Table 10. Life-Courses of People and Buildings

9.2.2 Continuities and Transformations: Multiple Scales

Recognising agency on the abovementioned grounds requires that we view prehistoric dwellings as dynamic and changing entities rather than as static and fixed. This is important because it is all too easy to confuse continuity with conservatism or to imply that places were immobile and unchanged. On the contrary, if houses are to be regarded as having parallel lives with their inhabitants or as leading lives of their own being animate agents, as so many ethnographic examples have shown, then we must study them accordingly as ‘processes’ rather than as ‘bricks and mortar’ (Carsten and Hugh Jones 1995: 36-7). In other words, we have to shift the focus from typology and function to consider the possibility ‘of houses and their inhabitants as part of one process of living’ (Carsten and Hugh Jones 1995: 37).

Recent anthropological models that have put the domestic sphere at the centre stage of their enquiries stress the dynamic and processual character of kinship and consequently the changing nature of houses and the interplay between permanence and impermanence. In two important edited works, Carsten’s and Hugh-Jones’ *About the House* (1995) and Joyce’s and Gillespie’s *Beyond Kinship* (2000) authors have drawn from a wide range of ethnographic sources to cogently illustrate the malleable nature of domestic architecture and kinship and the multiple temporalities that one draws from the other. They stress the need to go beyond the static perception of stages within the developmental cycle of

households such as those envisaged by Goody (1958b) and Fortes (1958). At the same time, of particular relevance to archaeology is the interest of recent anthropological studies in the houses themselves, that is, as physical structures the stages and historical dimension of which can be linked to the institutional and social aspect of Levi-Strauss' model of house-based societies.

In this research, I have found the above anthropological models particularly helpful and I have extensively drawn from a number of ethnographic examples. These models and examples, particularly from Austronesian cultures, where research on houses and house societies has been particularly rich, were not used here as direct analogies. Instead, they have helped me envisage prehistoric buildings as 'living' entities and understand their genealogies; given my own very different 'cultural baggage' and being interested in figuring out how the materials, phases and stratigraphic matrices of the excavated physical structures can be 'read' as repeated practices and sequences of actions. Archaeologists often are too quick at dismissing the validity of ethnographic sources. It is true that a 'one fits all' approach would be misplaced, as would be trying to match the archaeological evidence at hand with the best ethnographic example from a range of known world cultures.

Approaching the data from an anthropological perspective has also pointed out to me why a multi-scalar approach is all that more important in a study of the relationship between memory and the 'living house'. By this I mean that if the study was conducted solely on the analytical level of the long term, that is, the replication patterns as shown by methods of house replacement attempting to identify patterns and long term developments, it would have missed the rich details contained in individual episodes, such as the multiple replastering and renovations, as well as the details extrapolated from the contextual associations in each stage. Hence, a multi-scalar approach (Tringham 1991) was deemed more appropriate taking into account the complex relationships between house permanence and transient human lives and between the social and cognitive scales of memory. Viewing architecture as a flexible medium with its own temporalities and memories allows us to consider different versions of their biographies and longevity. For example, some houses will go on to develop into origin houses and their place names remembered for a long time (Carsten and Hugh-Jones 1995, Waterson 1990, Lane 2005) while others will be abandoned when the household head dies (Waterson 1990, Tringham 1995) and after two or three generations their stories will have been forgotten. Yet others will continue to transform

within much shorter scales, as Bloch's example of houses that 'mature and acquire bones' after marriage, in the form of more permanent construction materials, shows (Bloch 1995).

9.2.3 Intentionality *versus* Routinisation

Practice-based methodologies that focus on sequences of repeated actions, as adopted in the present research, are suggestive of the 'citational' nature of actions (Butler 1993), the tendency to reference earlier acts or routines (Bourdieu 1990). A question that arises and was posed earlier is to what extent can we go further and distinguish between acts which concern an historical awareness in the form of explicit commemoration and unreflective or routinised actions? When a repeated practice is to be taken as conscious referencing, perhaps even strategic, and when as a conservative or simply traditional act (Joyce and Lopiparo 2005: 366, Pauketat, T.R. 2001)? How do we go about distinguishing between the two? One way is to understand the difference in scale and consequences between specific instances of short term commemorative performance and long term cultural memory (Meskell 2003, Olick and Robbins 1998 with references). The former references specific events and social memories while the latter has 'lost' its memory of specific events and persons and has become ritualised in the sense of the habitual (Hodder and Cessford 2004: 32, Gosden and Lock 1998).

Two archaeological examples are relevant here. As an example of focusing on 'memory specificity', Hodder and Cessford (2004) interpret the evidence from Çatal Hüyük of house replacement in the exact location of previous arrangements or the retrieval pits dug after a building was abandoned to retrieve relief sculpture, as specific commemorative events. Meskell (2003) has explored long-term memorialisation in the Theban West Bank. The New Kingdom village of Deir el Medina was occupied by workmen involved in the construction of the nearby pharaonic tombs. The remains of the site comprised several houses and a large number of tombs. The short-term, specific commemorative practices concerned ancestral veneration, festivals and mortuary rituals. When the site was revisited by Roman travellers, on their way to the Valley of the Kings it acquired a rather different meaning. Not realising that the standing remains belonged to workmen's houses, travellers were compelled to make ritual offerings assuming that the site had been sacred ground. Meskell takes this instance as a characteristic example of 'disjunctive memories' (Meskell 2003: 49) where the original meaning had been lost and where cultural memory takes over operating in isolation from specific events and persons.

Similarly, in the Cypriot material that has been examined here, we can see instances of specific social memories acted out, such as the removal of burials from abandoned houses at *Mosphilia*, the 'repeated' house plans at Marki, or the ritual destructions at *Vrysi*. On the other hand, we have also seen shorter and longer term disjunctures of memory such as the re-occupation of Aceramic sites in the Late Neolithic that do not seem to have retained any 'memory' of previous spatial arrangements, or the cycles of abandonment and relocation at *Mosphilia*. At the same time, it was recognised in this thesis, that we have to be cautious in positing oppositions such as intentional or unreflective in the archaeological record and we have to admit that such conjectures always entail a degree of the archaeological imagination creating 'disjunctive memories' of its own. Moreover, some repeated practices in prehistory will be so subtle that will go unnoticed or, in other cases, what will have started as random unreflective acts, will have produced a historical awareness; for example, the digging of pits for utilitarian purposes at random spots in the landscape of *Mosphilia*, by its Chalcolithic inhabitants, becoming aware in the process of the antiquity of the place by accidentally encountering Early Aceramic features.

We also have to keep in mind that for the people involved in these acts of 'unintended' commemoration (in the sense of Giddens' unintended consequences, 1984, also Barrett 2000, Barrett and Fewster 2000), in the routinised rehearsal of long term social memories, or in the commemoration of specific events, the separation between tradition and memory-specificity might be more blurred. As a way of example, anthropologists often mention their frustration when their informants' answers are too general to the point where researchers wonder whether the commemorative rituals they have witnessed have any meaning or 'memory' at all. The houses in many South East Asian societies are regarded as 'alive' and named after various body parts as was mentioned earlier. The rituals of their construction and inhabitation are the same as those that commemorate the life stages of their inhabitants. Yet when people were asked whether the whole village was regarded as a human being their reaction was to laugh and dismiss the question as ridiculous (Barnes in Waterson 1990: 121). Waterson interprets this denial as a reluctance to 'defuse the power of symbolism by making explicit what it is preferred should remain tacit and implicit' (Waterson 1990: 121) rather than postulating an unreflective attitude to what was clearly symbolically important in their history.

From a different point of view, anthropologists are often presented with answers such as 'we do this because it is the custom of the ancestors', 'it goes back to early history'

or 'we do this because it is what one does at these events' (Bloch 2004: 68, 73). Again, rather than being unreflective or unintentional acts, they imply that the ritual actors are conscious that their actions are repetitions and that they must have originated by some sort of authority, whether ancestors or institutions that can guarantee their value (Bloch 2004: 68-9, cf Bell 1992). Bloch argues that such 'quotations' as well as the phenomenon of 'deference', that is, the reliance of people on the authority of their originators characterise all rituals.

There are many more examples and an equal number of arguments and opinions regarding repeated practices and memory. Rather than providing definite answers this thesis has drawn attention to some aspects highlighting the potential that *practice*-based methodologies can have for archaeological interpretation and for opening avenues for future research.

9.3 Settlement and Time Depth in Prehistoric Cyprus: A Working Model

The purpose of the methodological orientation of this research was to gain access into the heterogeneous *memoryscape* of prehistoric communities. This was illustrated in a number of case studies from prehistoric Cyprus. From a diachronic point of view, the Cypriot settlement record is characterised by a series of discontinuities that involve short term cycles of occupation, abandonment, displacement and relocation; in other words, horizontal or 'open' sites where monumentality, and explicit continuity through vertical superimposition are not attested. It was mentioned earlier that the Cypriot material might not have been an ideal choice for this kind of research, if its sole purpose would have been to prove the 'success' of vertical methodologies, like it has been demonstrated for the deeply stratified sites of Anatolia and the Balkans (e.g. D. Bailey 1990, Hodder and Cessford 2004, Banning and Byrd 1987). Nevertheless, this research was not conducted as merely a feasibility study and despite the inherent difficulties and limitations of the data within open sites I believe that I have drawn attention to the highly variable ways in which communities might have acquired a sense of *place* and history within the 'horizontal' landscapes they inhabited. No attempt was made at any point to provide an explanation as to why Cyprus was different from other areas of the Eastern Mediterranean or why its settlements did not develop into *tells* and urban centres with higher levels of social stratification and complexity. The question instead was rephrased into *how* the people inhabiting these settlements created social time, transmitted the stories of their predecessors and charted

their histories across a landscape that might have lacked 'timemarks' (Chapman 1997); although the latter is our own perception.

It was noted earlier that an exploration of the formation of social memory in Prehistoric Cyprus through time, that is in the long term, was not the focus of this study; having instead concentrated on micro-scale methodologies. However, the case studies used in this thesis cover a long time span roughly from the Aceramic Neolithic through to the Early-Middle Cypriot period. In this final section a more diachronic element is briefly introduced as a way of exploring avenues for future research. However, the aim is not to present a fully fledged argument but rather to propose a working model for addressing the question of how different forms of memory developed over time; what can the material media used and especially architectural forms tell us about the communities in question; what were the social systems that were supporting or indeed encouraged particular (material and cognitive) forms of historical awareness and transmission of the past? Can the continuities and discontinuities discussed in this thesis play a part in a long term narrative?

As a starting point and of direct relevance to this thesis is Tringham's point that the distinction between tell formation and horizontal displacement is qualitative, each bringing to the fore different kinds of 'memory-making of places' (Tringham 2000: 131). She concludes that formal ritualised performance characterises the former while informal memory, story telling and gossip are traits of the latter. Her archaeological examples come from Anatolia and Europe. Building on Tringham's thesis, the present research suggests that similar processes were in operation in prehistoric Cyprus. The lack of centralised organisation and supra household institutions meant that there was greater freedom and flexibility in the way individuals and communities formed an identity and transmitted social memories. A tentative suggestion has already been made earlier (7.3.1) that autobiographical memory might have been the main cognitive mechanism of transmission (following Whitehouse 1993, 1995, see also below table 11), especially during the Late Neolithic and Chalcolithic periods and that by the time of the late phases of Early-Middle Cypriot (7.3.2) we see the incipient stages of more widely shared, social memories (see also Bolger 2005).

The central tenet of this argument is based on Whitehouse's (1993, 1995) distinction between the doctrinal and imagistic modes of religiosity. According to Whitehouse, two specific cognitive mechanisms may have a direct effect on how 'culture', in the form of ideas, is generated and transmitted: semantic and episodic (autobiographical) memory (for

definitions see 3.2.2). He goes on to propose that the reliance on one or the other form of memory for the transmission and organisation of rituals correspond to two contrasting modes of religious systems and by extent to two different systems of socio-political organisation (table 11). The ‘doctrinal’ mode relies on semantic, widely shared, memory whilst the ‘imagistic’ mode relies on more personal and emotional autobiographical memory. Rituals and ideas within the ‘doctrinal’ mode of religiosity are frequent, verbal and centrally organised as opposed to the ‘imagistic’ mode where their repetition is infrequent, dramatic, and nonverbal.

Variable	DOCTRINAL	IMAGISTIC
Psychological Features		
Transmissive frequency	High	Low
Level of Arousal	High	High
Principal memory system	Semantic schemas/Implicit scripts	Episode/Flashbulb memory
Ritual meaning	Learned/acquired	Internally generated
Techniques of revelation	Rhetoric, logical integration, narrative	Iconicity, multivocality and multivalence
Socio-political features		
Social cohesion	Diffuse	Intense
Leadership	Dynamic	Passive/absent
Inclusivity/exclusivity	Inclusive	Exclusive
Spread	Rapid, efficient	Slow, inefficient
Scale	Large-scale	Small scale
Degree of uniformity	High	Low
structure	centralised	Noncentralised

Table 11. Modes of religiosity contrasted, after Whitehouse 2002a: 309.

Extending the argument beyond the realm of religion, could we be seeing something similar in Prehistoric Cyprus, based on the evidence presented in this thesis? How do the infrequently performed but personally witnessed and intensely remembered dramatic events such as ritual destructions associated with rites of passage like it was argued for *Vrysi* or *Mosphilia* compare to the visually more prominent and repeated actions associated with the architectural complex at *Tenta*, or the Tholoi at *Khirokitia*? What changes in the household and community composition prompted or encouraged the more frequent and consistent repetition of house plans and generational continuity that we saw at *Marki*?

The implications of following this line of thought is that there is scope for utilising other lines of evidence, identifiable in the archaeological record, in order to further substantiate the above argument. Tringham’s list of variables (table 12) could be used as the basis for identifying trends within the material and architectural record under investigation, in order to construct a long term perspective of the mechanisms of social memory and transmission in prehistoric Cyprus (table 13). For example, the methods of house replacement and the end of the life history of a house, both of which were examined in this thesis are paramount in exploring how the multiple temporalities within the history of dwellings contribute to the overall history of a community. The methods of artefactual deposition (materiality, ephemerality), use of space (visibility, boundaries, cemeteries), symbolic expression, social cohesion (household *vs.* community) are only some variables that can be fleshed out from the archaeological record and which can suggest how social memory of place was established (table 13). The challenge in future research will be to establish whether the case studies researched in this thesis are representative of a specific horizon or region. Building a more representative sample and establishing methodological consistency is considered here as one of the most important tasks and implications for future research and a direct outcome of the research undertaken in the present thesis.

Geographical Area	EUROPE 'open' sites	ANATOLIA <i>tells</i>
Cultural Period	Neolithic (after Tringham 2000, fig. 6-5)	Neolithic (after Tringham 2000, fig. 6-5)
Sites	e.g. Opovo, Selevac	e.g. Catalhoyuk
Method of House Replacement	Open sites with complete horizontal displacement of buildings	<i>Tells</i> of vertically superimposed buildings
Passages between and within houses	Detached houses in independent space	'Houses' are contiguous rooms, accretions around a courtyard
Burials	Burials distant from residence	Frequent burial within houses under floors
End of the life history of a house	'Killed' by burning	Changed into 'ancestor place'
Patterns of dominance	Aggregate of independent households	Village of centrally organised households
Means of resistance	Ability for single household to fission	Fixed attachment to place makes it difficult to fission
Social memory of place established by	Informal gossip and storytelling	Formal ritualised performance
Materiality/ Visibility (added)	Low	High

Table 12. Material correlates of forms of memory in Europe and Anatolia, after Tringham 2000: fig. 6-5, p. 130

Geographical Area	CYPRUS 'open sites'			
Cultural Period	Aceramic Neolithic	Ceramic Neolithic	Chalcolithic	Early-Middle Bronze Age
Sites	e.g. <i>Tenta, Shilourokampos</i> Khirokitia	e.g. <i>Sotira, Vrysi,</i> Kantou	e.g. <i>Erimi, Ayious,</i> <i>Mosphilia</i>	e.g. <i>Marki,</i> <i>Kamminoudhia,</i> Alambra
Method of House Replacement	Open sites. Horizontal displacement/some vertical superposition	Vertical (Vrysi) horizontal/ accretive (Sotira)	Pairs of overlapping houses, short time span Horizontal displacement. Settlement relocation	superimposed buildings, repeated positions
Passages between and within houses	Clusters	Clusters	Free-standing	Compounds accretions around a courtyard
Burials	Sub floor burials and extra mural midden burials	intra and extra mural in close proximity to settlement (ST)	Sub-floor burials are rare, mostly outside in connection with house walls, burials in houses after abandonment. Regional cemeteries (?)	Extra-mural cemeteries
End of the life history of a house	Ancestor place, 'clean' floors	Ritual destructions	Ritual destructions	Complete demolition and rebuilding
Symbolic expression	Anthropomorphic figurines and mural decoration		Birth figurines, building model	relief scenic compositions in vessels, shrine models,
Patterns of dominance	Lineages (?)	Egalitarian	Egalitarian, emergent inequalities	Corporate lineage groups
Means of resistance	ability for household to fission	ability for household to fission	ability of household to fission	limited (controlled) ability for household to fission
Social memory of place established by	Origin places	Informal memory	Rites of passage (autobiographical memory)	Inheritance, ancestors
Materiality/Visibility	High	Low	Low	Low

Table 13. Material correlates of forms of memory in Cyprus, adapted from Tringham 2000: fig. 6-5, p. 130

9.4 Conclusions and Scope for Future Research

The aim of the present research is to contribute to *the past in the past* approach by building on existing work on the subjects of memory-time-materiality and subsequently by suggesting a robust and suitable methodological framework to address these issues in practical/archaeological contexts; in this case, the domestic record of the early Prehistoric communities of Cyprus. In particular, the central tenet and resulting implications of this

endeavour can be summarised in the following four points which have informed the present thesis from the outset:

- A multi-scalar methodological framework (after Tringham 1995, see also chapter 2) has proved to be a fruitful exercise in analysing and interpreting the temporal depth of activities; with the underlying aim to bring to the fore the complexities and multiple levels of remembering (personal, generational, social, community).
- Providing a critical theoretical framework (chapters 3-4) was one of the aims of this research. A relational model of cognition was espoused ('the extended mind' after Clark and Chalmers 1998, see also 4.3.1) which sees the wider environment (including the world of objects) as extensions of cognitive processes and memory ('distributed objects' after Gell 1992, see also 4.3.1); with great potential for archaeology. In this thesis the house was considered as one such 'distributed object'. Practice-based theory was incorporated in the methodology of this research where the ultimate aim was to be able to translate the products of excavation (stratigraphy, stages) into sequences of action performed by conscious actors (2.3).
- The analytical focus of this thesis was the house as a *place* of (*for*) memory. It was particularly stressed that approaching the subject of memory (and *memoryscapes*) from the perspective of the house is ideal for redressing the balance between inscription and incorporation (2.5).
- The case studies, all taken from the record of Prehistoric Cyprus provided the context and support for the above arguments (chapters 6-8). Although lacking the deep stratigraphic and repeated sequences of *tells*, the detailed analysis of the temporalities (including the discontinuities) within the prehistoric houses and communities of Cyprus revealed a suite of different practices of history and *place making*. Despite the challenges of studying repeated sequences in horizontally displaced, non-monumental sites, the selection of the material highlighted the need for, and indeed the potential of, incorporating less obvious categories of material culture and cultural settings.

The methodological framework and in particular the analytical procedures of the present research were devised in order to be able to answer a series of inter related questions (see chapter 2). Amongst them, two levels of 'reading' the archaeological material

were attempted: the **temporal dimension** of activities and the horizontal/visual boundaries of place. The questions relevant to the temporal dimensions of houses were

- *How did successive generations encountered and treated the remains of their immediate past?*
- *What can the repeated, innovative or unreflective practices that are observed in the domestic architectural record over time tell us about 'how these societies remember'⁶⁸?*

The general emerging trend was a great variability in the methods of house replacement and subsequently in the ways the continuity of the house, in the sense of *place* attachment would have been perceived and remembered. Despite the general picture of horizontally displaced buildings and settlements the continuity of the house and the relationship between past and present were materialised in several ways. Each site and each building studied has produced evidence for 'persistent' elements that perpetuated and acted as cores in the process of social and cultural reproduction. Fox (1993) has called these elements 'ritual attractors'; features that not only have a 'pre-eminence among the other parts of the house', from pillars and posts to hearths and heirlooms, but the successive generations of residents are aware of and acknowledge these attractors in the rituals of the house. In our case studies, hearths, pillars, burials and walls would have fulfilled this role, the former being the most common repeated element between renovations and re-buildings (e.g. building renovations at *Vrysi*, 6.3). In other cases, the pre-eminence of certain houses that survived successive building horizons compared to their contemporaries was noted. In some cases, these would have acted as historical references for the whole community, such as in the example of the architectural complex at *Tenta* (6.2) and the long lived compounds at *Marki* (7.2).

These observations remind us that architecture can 'inscribe' aspects of the passage of time onto different material forms and with different effects. The focus of this thesis has been on the non-monumental, everyday, domestic landscape of small scale agricultural communities. It was argued that in order to 'tune in' to the subtleties and short scale, repetitive rhythms of the everyday we need to incorporate multiple scales of analysis in our research frames; scales that would address the issue of social, ritual, personal and generational time. The latter has been attempted by looking at the 'generational' cycles of

⁶⁸ Tringham 1991, 2000, Pred 1984, 1990, Bailey 1990, Connerton 1989.

houses and the 'fit' between biological generations and generations of houses (chapter 5). With a methodological procedure that favours micro scale analysis in equal measures as longer term trends it was possible to address the notions of **materiality** and **ephemerality** and their role in the creation of historical associations; a subject that has informed the present research and that has recently concerned social theorists of memory (e.g. Connerton 1989, Joyce 2000, Kühler 1988, 1993,). In the aftermath of the analysis and interpretation of the case studies investigated in the present research, these themes have been clearly emerged as significant contributing factors to the production and cultural workings of memory in the specific cultural contexts that were researched here.

In particular, in this thesis it was stressed and demonstrated contextually that in certain cases we see the deliberate destruction of artefacts and structures, functioning perhaps as commemorative devices (e.g. large numbers of artefacts in abandonment rituals at *Mosphilia*, see 7.1.3) whilst in other contexts the materiality of the 'site' plays an important role in developing a line of house and/or community ancestry (e.g. the 'enclosed' type buildings at *Tenta*, see 6.3.1 and *Khirokitia*, see 8.2). In certain cases the house replacement strategies are replicating earlier plans ('repeated', 'enclosed' types) whilst in other contexts complete displacement or partial continuity ('displaced', 'continuous' types) constitute the norm. However, what it is argued here is that the contrast presented above is a qualitative one rather than simply a preservation bias. The implications of this are that the focus of our research and interpretation is on explaining the apparent variability; rather than postulating the lack of historical associations and awareness of the past. In other words, it was particularly emphasised that in future research we need to acknowledge the different cultural, social and psychological processes that are at work and their potential role in the depositional patterns observed and the formation of the archaeological record (Bradley 2005). We also need to be aware that, horizontally displaced sites, like those researched in the present thesis, produce a 'different' kind of evidence to the visually prominent 'memorials' in other parts of the world or chronological periods (Tringham 2001: 130-1); although this can be more challenging to be revealed archaeologically.

These contrasting modes of memory and *place making* in prehistory and particularly in prehistoric Cyprus have only been touched upon in the present thesis. They were discussed as part of a limited number of specific sites and under a methodological scheme that, as it was mentioned earlier, favoured a micro scale, case by case framework, rather than as part of a wider theoretical or regional debate. However, the contextual analysis of

the material under consideration taken together with the detailed investigation of house replacement strategies have highlighted the potential of the subject as well as suggesting ways of dealing with the archaeological evidence in a meaningful manner. Perhaps more importantly, this thesis has identified potential areas for future research making use of and building on the present methodology. As it was mentioned earlier, it is important to broaden the chronological and regional scope so as to present a more representative and balanced account of a long term perspective based on the working model presented in 9.3. The potential for cross-cultural comparisons is also worth considering.

However, I believe that this is only viable if we continue to pay close attention to the short term, the particular, the micro-scale level; and frame our questions accordingly. Examples would include questions regarding the criteria for isolating certain categories of material culture which are more likely to have 'retained' temporal imprints. Micromorphological studies of plaster floors or use wear analysis of artefacts are only two such possibilities. Also, questions regarding the role of taphonomy and preservation in understanding and identifying ephemeral monuments. Is taphonomy a cause or an effect and how we can distinguish between the two? Similarly, these subjects can be better addressed in fieldwork design and reporting. Efforts toward completing vertical excavation and giving equal weight to all episodes within the sequence of a building with regards to sampling, recording and reporting would yield more meaningful results with respect to the temporal depth of activities than a larger horizontal, but incomplete, exposure. Finally, this thesis recognises that the archaeological record will always be elusive in one way or another and that even if the story is never complete it is worth continuing to strive to reveal more *instances* of material and human biographies in the past.

References

- a Campo, A.L. 1994
Anthropomorphic Representations in Prehistoric Cyprus: A Formal and Symbolic Analysis of Figurines, c. 3500-1800 BC. Jonsered: P. Åströms Förlag, SIMA Pocketbook 109.
- Adam, B. 1990
Time and Social Theory. Cambridge: Polity Press.
- Alcock, S.E. 2002
Archaeologies of the Greek Past: Landscape, Monuments and Memories. Cambridge: Cambridge University Press.
- Allen, G.L. (ed.) 2004
Human Spatial Memory: Remembering Where. London: Lawrence Erlbaum Associates.
- Altman, I. And S.M. Low (eds.) 1992
Place Attachment. New York: Plenum Press.
- Ammerman, A.J. 2002
'Review of *Archaeologies of Memory* edited by R. Van Dyke and S. Alcock.' *Journal of Field Archaeology* 29: 74-77.
- Ammerman, A.J. and J. Stratton Noller 2005
'New light on Aetokremnos.' *World Archaeology* 37: 533-543.
- Anderson, B. 1983
Imagined Communities: Reflections on the Origin and Spread of Nationalism. London: Verso.
- Anderson, J.R. and G.H. Bower 1973
Human Associative Memory. New York: J. Wiley & Sons.
- Antze, P. and M. Lambek (eds.) 1996
Tense past: Cultural Essays on Trauma and Memory. New York: Routledge.
- Appadurai, A. 1981
'The past is a scarce recourse.' *Man* 16: 201-219.
- Appadurai, A. (ed.) 1986
The Social Life of Things. Commodities in Cultural Perspectives. Cambridge: Cambridge University Press.
- Ariès, P. and G. Duby (eds.) 1987
A History of Private Life. Vol. 1-4. Cambridge, Mass: Belknap Press of Harvard University Press.
- Ashmore, W. 2002
'Decisions and dispositions: socialising spatial archaeology.' *American Anthropologist* 104: 1172-83.
- Ashmore, W. and B. Knapp (eds.) 1999
Archaeologies of Landscape: Contemporary Perspectives. Oxford: Blackwell.
- Åström, P. 1966
Excavations at Kalopsidha and Ayios Iacovos in Cyprus. Lund: SIMA
- Augé, M. 2004
Oblivion, transl. by M. de Jager. Minneapolis: University of Minnesota Press.
- Aurenche, O. 1981
La Maison Orientale. L'Architecture du Proche-Orient Ancien des Origines au Milieu du Quatrième Millénaire. Paris: Geuthner.
- Baars, B.J. 1986
The Cognitive Revolution in Psychology. New York: Guilford.

- Bachelard, G. 1994 [1958]
The Poetics of Space, transl. by M. Jolas. Boston: Beacon Press.
- Baddeley, A. 1990
Human Memory: Theory and Practice. Boston: Allyn and Bacon.
- Baddeley, A. 1992
 'What is autobiographical memory?' In Conway, M., D.C. Rubin, Spinnler, and W.A. Wagenaar (eds.) *Theoretical Perspectives on Autobiographical Memory*, 13-29. Dordrecht: Kluwer Academic Publishers.
- Baddeley, A. 1999
Essentials of Human Memory. Hove: Psychology Press.
- Baert, P. 1992
Time, Self, and Social Being. Aldershot: Avebury.
- Bailey, D.W. 1990
 'The living house, signifying continuity.' In Samson, R. (ed.) *The Social Archaeology of Houses*, pp. 19-48. Edinburgh: Edinburgh University Press.
- Bailey, D.W. 2000
Balkan Prehistory: Exclusion, Incorporation and Identity. London.
- Bailey, G.N. 1981
 'Concepts, time-scales and explanations in economic prehistory.' In Sheridan, A. and G.N. Bailey (eds.) *Economic Archaeology*, pp. 97-117. Oxford: BAR, International Series 96.
- Bailey, G.N. 1983
 'Concepts of time in Quaternary prehistory.' *Annual Review of Anthropology* 12: 165-92.
- Banning, E.B. 2003
 'Housing Neolithic farmers.' *Near Eastern Archaeology* 66: 4-21.
- Banning, E.B. and B.F. Byrd 1987
 'Houses and the changing residential unit: domestic architecture at PPNB 'Ain Ghazal, Jordan.' *Proceedings of the Prehistoric Society* 53: 309-325.
- Bapty, I. and T. Yates (eds.) 1990
Archaeology After Structuralism. London: Routledge.
- Barnes, J.A. 1967
 'Genealogies.' In Epstein, A.L. (ed.) *The Craft of Anthropology*, pp. London: Tavistock.
- Barrett, J.C. 1988
 'Fields of discourse: reconstituting a social archaeology.' *Critique of Anthropology* 7: 5-16.
- Barrett, J.C. 1994
Fragments from Antiquity: An Archaeology of Social Life in Britain, 2900-1200 BC. Oxford: Blackwell.
- Barrett, J.C. 1999
 'The mythical landscapes of the British Iron Age.' In Ashmore, W. and B. Knapp (eds.) *Archaeologies of Landscape: Contemporary Perspectives*, pp. 253-65. Oxford: Blackwell.
- Barrett, J.C. 2000
 'A thesis on agency.' In Dobres, M-A and J. Robb (eds.) *Agency in Archaeology*, pp. 61-68. London: Routledge.
- Barrett, J.C., R. Bradley, and M. Green (eds.) 1991
Landscape, Monuments and Society. Cambridge: Cambridge University Press.
- Barrett, J. and K.J. Fewster 2000

- 'Intimacy and structural transformation: Giddens and archaeology, with a comment by L. McFadyen.' In Holtorf, C. and H. Karlsson (eds.) *Philosophy and Archaeological Practice. Perspectives for the 21st Century*, pp. 25-38. Göteborg: Bricoleur Press.
- Bartlett, F. 1932
Remembering: A Study in Experimental and Social Psychology. Cambridge: Cambridge University Press.
- Bar-Yosef, O. 2001a
'From sedentary foragers to village hierarchies: the emergence of social institutions.' In Runciman, W. (ed.) *The Origin of Human Social Institutions*, pp. 1-38. London: Proceedings of the British Academy 110.
- Bar-Yosef, O. 2001b
'The world around Cyprus: from Epi-paleolithic foragers to the collapse of the PPNB civilisation.' In Swiny, S. (ed.) *The Earliest Prehistory of Cyprus: from Colonisation to Explanation*, pp. 129-164. Boston, MA: CAARI, Monograph Series 2.
- Basso, K.H. 1996
'Wisdom sits in places: notes on a Western Apache landscape. In Feld, S. and K.H. Basso (eds.) *Senses of Place*, pp. 53-90. Santa Fe: School of American Research Press.
- Battaglia, D. 1992
'The body in the gift. Memory and forgetting in Sabarl mortuary exchange.' *American Ethnologist* 19: 2-18.
- Bell, C. 1992
Ritual Theory – Ritual Practice. Oxford: Oxford University Press.
- Ben-Amos, D. and L. Weissberg (eds.) 1999
Cultural Memory and the Construction of Identity. Detroit: Wayne Ste University Press.
- Bender, B. (ed.) 1992
Landscape: Politics and Perspectives. Oxford: Berg.
- Bender, D. 1967
'A refinement of the concept of household: families, co-residence and domestic function.' *American Anthropologist* 69: 493-504.
- Benjamin, D. and D. Stea (eds.) 1995
The Home: Interpretations, Meanings, and Environments. Aldershot: Avebury Press.
- Bergson, H. 1962
Matter and Memory. London.
- Binford, L.R. 1964
'A consideration of archaeological research design.' *American Antiquity* 29: 425-441.
- Binford, L.R. 1972
An Archaeological Perspective. New York: Seminar Press.
- Binford, L.R. 1981
'Behavioural archaeology and the 'Pompeii premise'' *Journal of Anthropological Research* 37: 197-208.
- Bintliff, J. (ed.) 1991
The Annales School and Archaeology. Leicester: Leicester University Press.
- Blanton, R.E. 1994
Houses and Households. A Comparative Study. New York: Plenum Press.
- Bloch, M. 1977
'The past and the present in the present.' *Man* 12: 278-92.
- Bloch, M. 1991
'Language, Anthropology, and Cognitive Science.' *Man* 26: 183-198.
- Bloch, M. 1995

- 'Questions not to ask of Malagasy carvings.' In Hodder, I., M. Shanks, A. Alexandri, V. Buchli, J. Carman, J. Last and G. Lucas (eds.) *Interpreting Archaeology. Finding Meaning in the Past*, pp. 112-215. London: Routledge.
- Bloch, M. 1996
'Internal and external memory: Different ways of being in history.' In Antze, P. and M. Lambek (eds.) *Tense Past: Cultural Essays on Trauma and Memory*, pp. 215-33. New York: Routledge.
- Bloch, M. 1998
How We Think They Think. Anthropological Approaches to Cognition, Memory, and Literacy. Boulder, Colorado: Westview.
- Bloch, M. 2000
'A well-disposed social anthropologist's problems with memes.' In Auger, R. (ed.) *Darwinising Culture: the Status of Memetics as a Science*. Oxford: Oxford University Press. (reprinted in Bloch, M. *Essays on Cultural Transmission*, pp. 87-101. Oxford and New York: Berg).
- Bloch, M. 2004
'Ritual and deference.' In Whitehouse, H. and J. Laidlaw (eds.) *Ritual and Memory. Towards a Comparative Anthropology of Religion*, 65-78. Creek CA: Altamira Press.
- Bloch, M. and J. Parry (eds.) 1982
Death and the Regeneration of Life. Cambridge: Cambridge University Press.
- Bloomer, K.C. and C.W. Moore 1977
Body, Memory, and Architecture. New Haven: Yale University Press.
- Boivin, N. 2000
'Life rhythms and floor sequences: excavating time in rural Rajasthan and Neolithic Çatalhöyük.' *World Archaeology* 31: 367-88.
- Bolger, D.L. 1983
'Khrysiliou-Ammos, Nicosia-Ayia Paraskevi, and the Philia culture of Cyprus.' *RDAC*: 60-73.
- Bolger, D. 1988
Erimi-Pamboula: A Chalcolithic Settlement in Cyprus. Oxford: BAR International Series 443.
- Bolger, D.L. 1992
'The archaeology of fertility and birth: a ritual deposit from Chalcolithic Cyprus.' *Journal of Anthropological Research* 48: 145-64.
- Bolger, D.L. 1994
'Figurines, fertility, and the emergence of complex society in prehistoric Cyprus.' *Current Anthropology* 37: 365-73.
- Bolger, D. 2003
Gender in Ancient Cyprus. Narratives of Social Change on a Mediterranean Island. Walnut Creek, CA: Altamira Press.
- Bolger, D. Peltenburg, E.J. and McCartney, C. 2000
- Bourdieu, P. 1973
'The Berber house.' In Douglas, M. (ed.) *Rules and Meaning: The Anthropology of Everyday Knowledge*, pp. 98-110. Harmondsworth: Penguin.
- Bourdieu, P. 1990
The Logic of Practice. Trans. R. Nice. Oxford: Polity Press.
- Bourguet, M., L. Valensi, and N. Wachtel (eds.) 1986

- Between Memory and History*. Special issue of *History and Anthropology* 2. London: Harwood Academic Publisher.
- Boyd, R. and P.J. Richerson 1985
Culture and the Evolutionary Process. Chicago: Chicago University Press.
- Boyd, R. and P.J. Richerson 2001
'Memes: universal acid or a better mouse trap.' In Auger, R. (ed.) *Darwinising Culture: The Study of Memetics as a Science*, pp. 143-162. Oxford: Oxford University Press
- Boyer, P. 2001a
Religion Explained: The Evolutionary Origin of Religious Thought. New York: Basic Books.
- Boyer, P. 2001b
'Cultural inheritance tracks and cognitive predispositions: the example of religious concepts.' In Whitehouse, H. (ed.) *The Debated Mind. Evolutionary Psychology versus Ethnography*, pp. 57-89.
- Boym, S. 2001
The Future of Nostalgia. New York: Basic Books.
- Bradley, R. 1990
The Passage of Arms: An Archaeological Analysis of Prehistoric Hoards and Votive Deposits. Cambridge: Cambridge University Press.
- Bradley, R. 1991
'Ritual, time, and history.' *World Archaeology* 23: 209-19.
- Bradley, R. 1998
The Significance of Monuments. On the Shaping of Human Experience in Neolithic and Bronze Age Europe. London and New York: Routledge.
- Bradley, R. 2000
An Archaeology of Natural Places. London: Routledge.
- Bradley, R. 2001
'The birth of architecture.' In Runciman, W.G. (ed.) *The Origin of Human Social Institutions*, pp. 69-92. *Proceedings of the British Academy* 110. Oxford: Oxford University Press.
- Bradley, R. 2002
The Past in Prehistoric Societies. London and New York: Routledge.
- Bradley, R. 2005
Ritual and Domestic Life in Prehistoric Europe. London: Routledge.
- Bradley, R. and H. Williams (eds.) 1998
The Past in the Past. The Re-Use of Ancient Monuments. Special Issue of *World Archaeology* 30(1).
- Braudel, F. 1972
The Mediterranean and the Mediterranean World in the Age of Phillip II. London: Collins.
- Broodbank, C. 2000
An Island Archaeology of the Early Cyclades. Cambridge: Cambridge University Press.
- Brooks, R. 1993
'Household abandonment among sedentary Plains societies: behavioural sequences and consequences in the interpretation of the archaeological record.' In Cameron, C. and S. Tomka (eds.) *Abandonment of Settlements and Regions*, pp. 178-87. Cambridge: Cambridge University Press.
- Brück, J. and M. Goodman (eds.) 1999a

- Making Places in the Prehistoric World: Themes in Settlement Archaeology*. Cambridge: Cambridge University Press.
- Brück, J. and M. Goodman 1999b
 'Introduction: themes for a critical archaeology of prehistoric settlement.' In Brück, J. and M. Goodman (eds.) *Making Places in the Prehistoric World: Themes in Settlement Archaeology*, pp. 19-30. Cambridge: Cambridge University Press.
- Brown, R. and J. Kulik 1977
 'Flashbulb memories. *Cognition* 1977: 73-99.
- Burke, P. 1988
 'History as social memory.' In Butler, T.H. (ed.) *Memory: History, Culture and the Mind*, pp. 97-113. Oxford: Blackwell.
- Burkitt, I. 1999
Bodies of Thought. Embodiment, Identity and Modernity. London: Sage.
- Butler, J. 1993
Bodies that Matter: On the Discursive Limits of Sex. London: Routledge.
- Buttimer, A. 1978
 'Charisma and context: the challenge of la géographie humaine.' In Ley, D. and M. Samuels (eds.) *Humanistic Geography: Prospects and Problems*, pp. 58-76. Chicago: Maaroufe.
- Byrd, B. 1994
 'Public and private, domestic and corporate: the emergence of the south-west Asian village.' *American Antiquity* 59: 639-66.
- Byrd, B. 2000
 'Households in transition. Neolithic social organisation within Southwest Asia.' In Kuijt, I. (ed.) *Life in Neolithic Farming Communities. Social Organisation, Identity and Differentiation*, pp. 63-98. New York: Kluwer Academic.
- Caldwell, J.T. 2000
Electronic Media and Technoculture. New Brunswick: Rutgers University Press.
- Calvino, I. 1979
Invisible Cities. London: Picador.
- Cameron, C. and S. Tomka (eds.) 1993
Abandonment of Settlements and Regions. Cambridge: Cambridge University Press.
- Campbell, S. 2000
 'The burnt house at Arpachiyah: a re-examination.' *BASOR* 318: 1-40.
- Canuto, M.A. and J. Yaeger (eds.) 2000
The Archaeology of Communities. A New World Perspective. London: Routledge.
- Carman, J. 1995
 'Interpretation, writing and presenting the past.' In Hodder, I. et al. (eds.) *Interpreting Archaeology. Finding Meaning in the Past*, pp. 95-99. Cambridge: Cambridge University Press.
- Carr, C. 1984
 'The nature of organisation of intrasite archaeological records and spatial analytic approaches to their investigation.' In Schiffer, M.B. (ed.) *Advances in Archaeological Method and Theory* 7: 103-222.
- Carrier, P. 2000
 'Places, politics, and the archiving of contemporary memory in Pierre Nora's *Les Lieux de Mémoire*.' In Radstone, S. (ed.) *Memory and Methodology*, pp. 37-57. Oxford: Berg.

- Carruthers, M. 1990
The Book of Memory: a Study of Memory in Medieval Culture. Cambridge: Cambridge University Press.
- Carsten, J. 1995
 'House in Langkawi: stable structures or mobile homes?' In Carsten, J. and S. Hugh-Jones (eds.) *About the House: Levi-Strauss and Beyond*, pp. 105-28. Cambridge: Cambridge University Press.
- Carsten, J. 1997
The Heat of the Hearth. Oxford: Clarendon press.
- Carsten, J. and S. Hugh-Jones (eds.) 1995a
About the House: Levi-Strauss and Beyond. Cambridge: Cambridge University Press.
- Carsten, J. and S. Hugh-Jones 1995b
 'Introduction: about the House – Levi-Strauss and beyond.' In Carsten, J. and S. Hugh-Jones (eds.) *About the House: Levi-Strauss and Beyond*, pp. 1-46. Cambridge: Cambridge University Press.
- Casey, E.S. 1987
Remembering: A Phenomenological Study. Bloomington: Indiana University Press.
- Casey, E.S. 1996
 'How to get from space to place in a fairly short stretch of time: phenomenological prolegomena.' In Feld, S. and K.H. Basso (eds.) *Senses of Place*, pp. 13-52. Santa Fe: SAR Press.
- Catling, H.W. 1966
 'Patterns of settlement in Bronze Age Cyprus.' *Opuscula Atheniensia* 4: 129-169.
- Catling, H.W. 1970
 'Cyprus in the Neolithic and Chalcolithic periods.' *Cambridge Ancient History* I.1, pp.539-56.
- Catling, H.W. 1971
 'Cyprus in the Early Bronze Age.' *Cambridge Ancient History* I.1, pp.808-23.
- Cauvin, J. 2000
The Birth of the Gods and the Origins of Agriculture. Cambridge: Cambridge University Press.
- Chapman, J. 1990
 'Social inequality on Bulgarian tells and the Varna problem.' In Samson, R. (ed.) *The Social Archaeology of Houses*, pp. 49-92. Edinburgh: Edinburgh University Press.
- Chapman, J. 1997
 'Places as timemarks. The social construction of prehistoric landscape in eastern Hungary.' In Nash, G. (ed.) *Semiotics of Landscape: Archaeology of Mind*, pp. 31-45. British Archaeological reports, International Series 661. oxford: Archaeopress.
- Chapman, J. 1999
 'Burning the ancestors: deliberate house firing in Balkan prehistory.' In Gustafsson, A. and H. Karlsson (eds.) *Glyfer och Arkeologiska rum en vanbok till Jarl Nordblad*, pp. 113-126. Göteborg:
- Chapman, J. 2000a
 'Pit-digging and structured deposition in the Neolithic and Copper Age.' *Proceedings of the Prehistoric Society* 66: 61-87.
- Chapman, J. 2000b
Fragmentation in Archaeology. People, Places and Broken Objects in the Prehistory of South-Eastern Europe. London: Routledge.
- Cherry, J.F. 1983

- 'Evolution, revolution and the origins of complex society in Minoan Crete.' In O. Krzyszkowska and L. Nixon (eds.) *Minoan Society. Proceedings of the Cambridge Colloquium 1981*. Bristol: Bristol University Press.
- Chesson, M.S. 1999
'Libraries of the dead: Early Bronze Age Charnel houses and social identity at Urban Babe dh-Dhra', Jordan.' *Journal of Anthropological Archaeology* 18: 137-164.
- Chesson, M.S. (ed.) 2001
Social Memory, Identity, and Death: Anthropological Perspectives on Mortuary Rituals. Archaeological Papers of the American Anthropological Association 10.
- Childe, V.G. 1942
What Happened in History? Harmondsworth: Penguin Books.
- Ciolek-Torrello, R. 1984
'An alternative model of room function from Grasshopper Pueblo, Arizona.' In Hietala, H. (ed.) *Intrasite Spatial Analysis in Archaeology*, pp. 127-154. Cambridge: Cambridge University Press.
- Clark, A. 1997
Being There: Putting Brain, Mind, Body and World Together Again. Cambridge MA: MIT Press.
- Clark, A. 2003
Natural Born Cyborgs: Minds, Technologies and the Future of Human Intelligence. Oxford: Oxford University Press.
- Clark, A. and D. Chalmers 1998
'The extended mind.' *Analysis* 59: 7-19.
- Clarke, D.L. (ed.) 1977
Spatial Archaeology. London: Academic Press.
- Clarke, J. 2001
'Style and society in Ceramic Neolithic Cyprus.' *Levant* 33: 65-80.
- Clarke, J. (ed.) 2005
Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean. Oxford: Oxbow. Levant Supplementary Series, Vol. 2.
- Cohen, A.P. 1985
The Symbolic Construction of Community. London and New York: Tavistock.
- Cohen, G. 1990
Memory in the Real World. Hillsdale, NJ: Erlbaum.
- Cole, J. 2001
Forget Colonialism? Sacrifice and the Art of Memory in Madagascar. Berkeley: California University Press.
- Coleman, J.E. et al. 1996
Alambra: A Middle Bronze Age Settlement in Cyprus. Archaeological Investigations by Cornell University 1974-1985. Jonsered: P. Åströms Förlag, SIMA 118.
- Coleman, J. 1992
Ancient and Medieval Memories: Studies in the Reconstruction of the Past. Cambridge: Cambridge University Press.
- Committee for the Protection of the Cultural Heritage of Cyprus 2000
Cyprus: a Civilisation Plundered. Athens: The Hellenic Parliament.
- Connerton, P. 1989
How Societies Remember. Cambridge: Cambridge University Press.
- Coser, L.A. 1992

- 'Introduction.' In Coser, L.A. (ed.) *Maurice Halbwachs: On Collective Memory*, pp. 1-36. Chicago: Chicago University Press.
- Cosgrove, D. 1984
Social Formation and Symbolic Landscape. Totowa, N.J.: Barnes and Noble.
- Costall, A. 1991
'Frederic Bartlett and the rise of prehistoric psychology.' In Still, A. and A. Costall (eds.) *Against Cognitivist. Alternative Foundations for Cognitive Psychology*, pp. 39-54. New York: Harvester Wheatsheaf.
- Costall, A. and A. Still 1991
'Introduction. Cognitivism as an approach to cognition.' In Still, A. and A. Costall (eds.) *Against Cognitivist. Alternative Foundations for Cognitive Psychology*, pp. 1-6. New York: Harvester Wheatsheaf.
- Cox, S.J., T.J. Sluckin, and J. Steele 1999
'Group size, memory, and interaction rate in the evolution of cooperation.' *Current Anthropology* 40: 369-77.
- Crane, S.A. (ed.) 2000
Museum and Memory. Stanford, CA: Stanford University Press.
- Crew, L., K. Lorentz, E. Peltenburg and S. Spanou 2005
'Treatment of the dead: preliminary report of investigations at Souskiou-Laona Chalcolithic cemetery, 2001-2004. *RDAC* 2005, 41-67.
- Cullen, B. 2000
Contagious Ideas. On Evolution, Cultures, Archaeology and Cultural Virus Theory. Oxford: Oxbow.
- Cutting, M. 2006
'The architecture at Çatalhöyük: continuity, household and settlement.' Hodder, I. (ed.) *Çatalhöyük Perspectives: Themes from the 1995-99 Seasons*. Cambridge: McDonald Institute for Archaeological Research.
- David, B. and M. Wilson (eds.) 2002
Inscribed Landscapes. Marking and Making Place. Honolulu: University of Hawai'i Press.
- Dawkins, R. 1976
The Selfish Gene. Oxford: Oxford University Press.
- Deacon, T. 1997
The Symbolic Species: The Co-evolution of Language and the Human Brain. London: Norton.
- Deal, M 1985
'Household pottery disposal in the Maya highlands: an ethnoarchaeological interpretation.' *Journal of Anthropological Archaeology* 4: 243-91.
- De Certeau, M. 1984
The Practice of Everyday Life. Berkeley: University of California Press.
- Delacour, J. 2001
'Proust's contribution to the psychology of memory: The r eminiscences from the standpoint of science.' *Theory and Psychology* 11: 255-270.
- Dennet, D. 2000
Darwinising Culture: The Status of Memetics as a Science. Oxford: Oxford University Press.
- Dent, T. 2005
Materiality and Society. Maidenhead: Open University Press, McGraw-Hill Education.
- D' Erico, F. 1998

- 'Palaeolithic origins of artificial memory systems: an evolutionary perspective.' In Renfrew, C. and C. Scarre (eds.) *Cognition and Material Culture: the Archaeology of Symbolic Storage*, pp. 19-50. Cambridge: McDonald Institute for Archaeological Research.
- Dietler, M. 1998
'A tale of three sites: the monumentalisation of Celtic Oppida and the politics of collective memory and identity.' *World Archaeology* 30: 72-89.
- Dikaios, P. 1936
'The excavations at Erimi 1933-1935: final report. *RDAC* 1936: 1-81.
- Dikaios, P. 1940
'Excavations at Vounous-Bellapais in Cyprus, 1931-2.' *Archaeologia* 83: 1-168.
- Dikaios, P. 1953
Khirkitia. Oxford: Oxford University Press.
- Dikaios, P. 1961
Sotira. Philadelphia: University of Pennsylvania Press.
- Dikaios, P. 1962
The Stone Age and the Early Bronze Age in Cyprus. In Dikaios, P. and J.R. Stewart (eds.) *The Swedish Cyprus Expedition IV, 1A*, pp. 1-204. Lund: Swedish Cyprus Expedition.
- Dobres, M-A and J. Robb (eds.) 2000
Agency in Archaeology. London: Routledge.
- Donald, M. 1991
Origins of the Human Mind: Three Stages in the Evolution of Culture and Cognition. Cambridge, MA: Harvard University Press.
- Donald, M. 1998
'Hominid enculturation and cognitive evolution.' In Renfrew, C. and C. Scarre (eds.) *Cognition and Material Culture: the Archaeology of Symbolic Storage*, pp. 7-17. Cambridge: McDonald Institute Monographs.
- Donald, M. 2001
A Mind So Rare. New York and London: W.W. Norton and Company.
- Donley, L.W. 1982
'House power: Swahili space and symbolic markers.' In Hodder, I. (ed.) *Symbolic and Structural Archaeology*, pp. 63-73. Cambridge: Cambridge University Press.
- Douglas, M. 1966
Purity and Danger: an Analysis of Concepts of Pollution and Taboo. London: Routledge & K. Paul.
- Downs, R.M. and D. Stea 1977
Maps in Minds: Reflections on Cognitive Mapping. New York: Harper and Row.
- Draaisma, D. 2000
Metaphors of Memory. A History of Ideas about the Mind. Cambridge: Cambridge University Press.
- Dreyfus, H.L. 1979
What Computers Can't Do. New York: Harper & Row.
- Dreyfus, H.L. 1991
Being-in-the-World. Cambridge, MA: MIT Press.
- Dunbar, R.I.M. 1997
Grooming, Gossip and the Evolution of Language. London: Faber.
- Dunnell, R.C. 1980

- 'Evolutionary theory and archaeology.' In M.B. Schiffer (ed.) *Advances in Archaeological Method and Theory* 3, pp. 38-99. New York and London: Academic Press.
- Dunn-Vaturi, A-E 2003
Vounous: C.F.A. Schaeffer's Excavations in 1933: Tombs 49-79. Jonsered: P. Åström, SIMA, vol. 130.
- Durham, W.H. 1991
Coevolution: Genes, Culture and Human Diversity. Stanford: Stanford University Press.
- Düring, B.S. 2005
 'Building continuity in the Central Anatolian Neolithic: exploring the meaning of buildings at Aşikli Höyük and Çatalhöyük.' *Journal of Mediterranean Archaeology* 19: 3-27.
- Durkheim, E. [1911] 1984
The Division of Labor in Society. (trans. W.D. Halls). Basingstoke: Macmillan.
- Durkheim, E. [1915] 1965
The Elementary Forms of Religious Life, transl. by J.W. Swain. New York: The Free Press.
- Edmonds, M. 1999
Ancestral Geographies of the Neolithic: Landscapes, Monuments, and Memory. London and New York: Routledge.
- Edwards, D. and D. Middleton 1987
 'Conversation and remembering: Bartlett revisited.' *Applied Cognitive Psychology* 1: 77-92.
- Eirikh-Rose, A. 2004
 'Geometric patterns on pebbles: early identity symbols?' In Peltenburg, E. and A. Wasse (eds.) *Neolithic Revolution. New Perspectives on Southwest Asia in Light of Recent Discoveries on Cyprus*, pp. 145-62. Oxford: Levant Supplementary Series Vol. 1.
- Eliade, M. 1954
The Myth of the Eternal Return or, Cosmos and History. Princeton: Princeton University Press.
- Ellis, R. 1968
Foundation deposits in Ancient Mesopotamia. New Haven: Yale University Press.
- Entrikin, J.N. 1991
The Betweenness of Place. Baltimore: John Hopkins University Press.
- Eysenck, M.W. and M.T. Keane 2005 (5th edition)
Cognitive Psychology. Hove and New York: Psychology Press.
- Fabian, J. 1983
Time and the Other: How Anthropology Makes its Object. New York: Columbia University Press.
- Farris, N. 1987
 'Thinking about history. Remembering the future, anticipating the past: history, time, and cosmology among the Maya of Yucatan.' *Comparative Studies in Society and History* 29: 566-93.
- Feld, S. and K.H. Basso (eds.) 1996
Senses of Place. Santa Fe: School of American Research Press.
- Fentress, J. and C. Wickham 1992
Social Memory. Oxford: Blackwell.
- Flannery, K.V. 1972

- 'The origins of the village as a settlement type in Mesoamerica and the Near East: a comparative study.' In Ucko, P., R. Tringham, and G. Dimbleby (eds.) *Man, Settlement, and Urbanism*, pp. 25-53. London.
- Fletcher, R. 1984
'Identifying spatial disorder: a case study of a Mongol fort.' In Hietala, H. (ed.) *Intra-Site Spatial Analysis in Archaeology*, pp. 196-223. Cambridge: Cambridge University Press
- Flourentzos, P. 1997
'Excavations at the Neolithic site of Paralimni, a preliminary report.' *RDAC* 1997: 1-10.
- Fortier, A.-M. 2000
Migrant Belongings: Memory, Space, Identity. Oxford: Berg.
- Fortes, M. 1958
'Introduction' In Goody, J. (ed.) *The Developmental Cycle in Domestic Groups*, pp. 1-34. Cambridge: Cambridge University Press.
- Forty, A. and S. Kühler (eds.) 1999
The Art of Forgetting. Oxford: Berg.
- Foster, S. 1989
'Analysis of spatial patterns in buildings (access analysis) as an insight into social structure: examples from the Scottish Iron Age. *Antiquity* 63: 40-50.
- Foucault, M. 1977
Language, Counter-Memory, Practice: Selected Essays and Interviews. (ed. D.F. Bouchard). Ithaca: Cornell University Press.
- Fox, J. (ed.) 1993
Inside Austronesian Houses: Perspectives on Domestic Design from Living. Canberra: Research School of Pacific Studies, Australian National University.
- Foxhall, L. 2000
'The running sands of time: Archaeology and the short-term,' *World Archaeology* 31: 484-499.
- Frankel, D. 2000
'Migration and ethnicity in Prehistoric Cyprus: technology as *habitus*.' *Journal of European Archaeology* 3: 167-87.
- Frankel, D. 2002
'Social stratification, gender and ethnicity in Third Millennium Cyprus.' In D. Bolger and N. Serwint (eds.) *Engendering Aphrodite: Women and Society in Ancient Cyprus*, pp. 171-9. Boston: ASOR.
- Frankel, D. 2005
'Becoming Bronze Age: acculturation and enculturation in third millennium BC Cyprus.' In Clarke, J. (ed.) *Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean*, pp. 19-24. Oxford: Levant Supplementary Series, Vol. 2.
- Frankel, D., J. Webb and C. Eslick 1995
'Anatolia and Cyprus in the third millennium BCE. A speculative model of interaction.' *Abr Nahrain Supplement* 5: 37-50.
- Frankel, D., J. Webb, and C. Eslick 1996
'Anatolia and Cyprus in the third millennium BCE. A speculative model of interaction.' In Bunnens, G. (ed.) *Cultural Interaction in the Ancient Near East*, pp. 37-50. Louvain: Peeters Press.
- Frankel, D. and J. Webb 1996

- Marki Alonia. An Early and Middle Bronze Age Town in Cyprus. Excavation 1990-1994.*
Jonsered: P. Åströms Förlag, SIMA 123.
- Frankel, D. and J. Webb 1998
'Three faces of identity: ethnicity, community, and status in the Cypriot Bronze Age.' *Mediterranean Archaeology* 11: 1-12.
- Frankel, D. and J. Webb 2000
'Marki-Alonia: a prehistoric Bronze Age settlement in Cyprus.' *Antiquity* 74: 763-64.
- Frankel, D. and J.M. Webb 2001
'Population, households, and ceramic consumption in a prehistoric Cypriot village.' *Journal of Field Archaeology* 28: 115-29.
- Frankel, D. and J.M. Webb 2006a
Marki-Alonia. An Early and Middle Bronze Age Settlement in Cyprus. Excavations 1995-2006. Sävedalen: Paul Åströms Förlag, SIMA, vol. CXXXIII: 2.
- Frankel, D. and J.M. Webb 2006b
'Neighbours: negotiating space in a prehistoric village.' *Antiquity* 80: 287-302
- Freeman, M. 1993
Rewriting the Self. History, Meaning, Narrative. London and New York: Routledge.
- Gardner, H. 1985
The Mind's New Science. A History of the Cognitive Revolution. New York: Basic Books.
- Garro, L.C. 2001
'The remembered past in a culturally meaningful life: remembering as cultural, social and cognitive process.' In Moore, C.C. and H.F. Mathews (eds.) *The Psychology of Cultural Experience*, pp. 105-147. Cambridge: Cambridge University Press.
- Gell, A. 1992
The Anthropology of Time: Cultural Construction of Temporal Maps and Images. Oxford: Berg.
- Gell, A. 1998
Art and Agency. An Anthropological Theory. Oxford: Oxford University Press.
- Gero, J.M. and M.W. Conkey (eds.) 1991
Engendering Archaeology. Women in Prehistory. Oxford: Blackwell.
- Gerritsen, A. 1999
'To build or to abandon. The cultural biography of late prehistoric houses and farmsteads in the southern Netherlands.' *Archaeological Dialogues* 6: 78-114.
- Gibson, J.J. 1950
The Perception of the Visual World. Boston: Houghton Mifflin.
- Gibson, J.J. 1979
The Ecological Approach to Visual Perception. Boston, MA: Houghton Mifflin.
- Gibson, T. 1995
'Having your house and eating it: houses and siblings in Ara, South Sulawesi.' In J. Carsten and S. Hugh-Jones (eds.) *About the House: Levi-Strauss and Beyond*, pp. 105-28. Cambridge: Cambridge University Press.
- Giddens, A. 1979
Central Problems in Social Theory: Action, Structure and Contradiction in Social Analyses. London: Macmillan.
- Giddens, A. 1981
A Contemporary Critique of Historical Materialism, vol. 1, *Power, Property and the State.* Berkeley: University of California Press.
- Giddens, A. 1984

- The Constitution of Society: An Outline of the Theory of Structuration*. Berkeley: University of California Press.
- Gieryn, T.F. 2000
 'A space for place in sociology.' *Annual Review of sociology* 26: 463-96.
- Gillis, J.R. 1994a
 'Memory and identity. The history of a relationship. In Gillis, J. R. (ed.) *Commemorations: The Politics of national Identity*, pp. 3-24. New Jersey: Princeton University Press.
- Gillis, J.R. (ed.) 1994b
Commemorations: The Politics of National Identity. Princeton: Princeton University Press.
- Given, M. 2000
 'Agriculture, settlement and landscape in Ottoman Cyprus.' *Levant* 32: 209-30.
- Gjerstad, E., J. Lindros, E. Sjöqvist and A. Westholm 1934
 'Finds and results of the excavations in Cyprus 1927-1931.' *The Swedish Cyprus Expedition*, Vol. 1. Stockholm.
- Gjerstad, E. et al. 1936
Swedish Cyprus Expedition. Finds and Results of the Excavations in Cyprus 1927-1931, I and II. Stockholm.
- Glenberg, A.M. 1997
 'What memory is for?' *Behavioral and Brain Sciences* 20: 1-55.
- Goody, J. 1958a
The Developmental Cycle in Domestic Groups. Cambridge: Cambridge University Press
- Goody, J. 1958b
 'The fission of domestic groups among the LoDagaba.' In Goody, J. (ed.) *The Developmental Cycle in Domestic Groups*, pp. 53-91. Cambridge: Cambridge University Press
- Goody, J. 1977
Domestication of the Savage Mind. Cambridge: Cambridge University Press.
- Goonatilake, S. 1991
The Evolution of Information: Lineages in Gene, Culture and Artefact. London: Pinter.
- Goring, E. 1991
 'Pottery figurines: the development of coroplastic art in Chalcolithic Cyprus.' *BASOR* 282/283: 39-60.
- Gosden, C. 1994
Social Being and Time. Oxford: Blackwell.
- Gosden, C. 1999
Anthropology and Archaeology. A Changing Relationship. London and New York: Routledge.
- Gosden, C. and G. Lock 1998
 'Prehistoric histories.' *World Archaeology* 30: 2-12.
- Gosden, C. and Y. Marshall 1999
 'The cultural biography of objects.' *World Archaeology* 31: 169-178.
- Graves-Brown, P.M. 1995
 'Fearful symmetry.' *World Archaeology* 27: 88-99.
- Graves-Brown, P.M. 2000a
 'Introduction.' In Graves-Brown, P.M. *Matter, Materiality and Modern Culture*, pp. 1-9. London: Routledge.
- Graves-Brown, P.M. (ed.) 2000b

- Matter, Materiality and Modern Culture*. London: Routledge.
- Guilaine, J., et al. 1995
 'L'establisement néolithique de Shillourokambos (Parekklisha, Chypre). Premiers resultats.' *RDAC* 1995: 11-32.
- Guilaine, J., et al. 1997
 'Chroniques et rapports. Rapports sur les travaux de l'Ecole Française d'Athènes. Shillourokambos (Chypre).' *BCH* 121: 825-30.
- Guilaine, J. et al. 1998
 'La site néolithique précéramique de Shillourokambos (Parekklisha, Chypre). *BCH* 122: 603-10.
- Guilaine, J. et al. 2000
 'Découverte d'un néolithique précéramique ancien Cypriot (fin 9e, debut 8e millénaires cal BC) apparenté au PPNB ancien/moyen.' *Earth and Planetary Sciences* 300: 75-82.
- Guilaine, J. and F. Briois 2001
 'Parekklisha Shillourokambos. An Early Neolithic site in Cyprus.' In Swiny, S. (ed.) *The Earliest Prehistory of Cyprus: from Colonisation to Exploitation*, pp. 37-53. Boston: CAARI Monographs Vol. 2.
- Guilaine, J. and A. Le Brun (eds.) 2003
Le Néolithique de Chypre. Actes du Colloque International Organisé par le Département des Antiquités. Paris: BCH Supplement 43.
- Hacking, I. 1996
 'Memory sciences, memory politics.' In Antze, P. and M. Lambek (eds.) *Tense Past: Cultural Essays on Trauma and Memory*, pp. 67-87. New York: Routledge.
- Hadjisavvas, S. 1977
 'The archaeological survey of Paphos: a preliminary report.' *RDAC* 1977: 222-31.
- Halbwachs, M. 1950
The Collective Memory, edited by M. Douglas, trans. by F.J. Ditter and V.Y. Ditter.
- Halbwachs, M. 1952 [1926]
Les Cadres Sociaux de la Mémoire. Paris: Presses Universitaires de France.
- Halbwachs, M. 1971
La Topographie Légendaire des Evangiles En Terre Sainte. Paris: Presses Universitaires de France.
- Halbwachs, M. 1992 [1926]
On Collective Memory, edited and trans. by L.A. Coser. Chicago: Chicago University Press.
- Hallam, E. and Hockey, J. 2001
Death, Memory and Material Culture. Oxford: Berg.
- Hall, E.T. 1966
The Hidden Dimension. Garden City, NY: Doubleday.
- Hamilakis, Y. 2002
 'The past as oral history. Towards an archaeology of the senses.' In Hamilakis, Y., M. Pluciennik and S. Tarlow (eds.) *Thinking through the Body. Archaeologies of Corporeality*, pp. 121-136. New York:
- Hamilakis, Y. and E. Yalouri 1996
 'Antiquities as symbolic capital in modern Greek society.' *Antiquity* 70: 117-29.
- Hamilton, N. 1994
 'A fresh look at the 'seated gentleman' in the Pierides Foundation Museum, Republic of Cyprus.' *Cambridge Archaeological Journal* 4: 302-12.

- Haraway, D. 1991
Simians, Cyborgs and Women. The Reinvention of Nature. London: Routledge.
- Harris, R. 1986
The Origin of Writing. London: Duckworth.
- Harvey, D. 1989
The Condition of Postmodernity. Oxford: Blackwell.
- Hawkes, C. 1954
 'Archaeological method and theory: some suggestions from the Old World.'
American Anthropologist 56: 155-168.
- Heidegger, M [1977] 1993
 'Building, Dwelling, Thinking.' In Krell, F. (ed.) *M. Heidegger: Basic Writings*, pp. 347-63. London: Routledge.
- Held, S.O. 1989
 'Colonisation cycles on Cyprus: the biogeographic and paleontological foundations of early prehistoric settlement.' *RDAC* 1989: 7-28.
- Held, S.O. 1990
 'Back to what future? New Directions for Cypriot Early Prehistoric Research in the 1990's.' *RDAC* 1990: 1-44.
- Held, S.O. 1993
 'Insularity as a modifier of culture change: the case of prehistoric Cyprus.' *BASOR* 292: 25-34.
- Helms, M.W. 1988
Ulysses' Sail: An Ethnographic Odyssey of Power, Knowledge, and Geographical Distance. Princeton: Princeton University Press.
- Hendon, J.A. 1996
 'Archaeological approaches to the organisation of domestic labor: household practice and domestic relations.' *Annual Review of Anthropology* 25: 45-61.
- Hendon, J.A. 2000
 'Having and holding: storage, memory, knowledge, and social relations.' *American Anthropologist* 102: 42-53.
- Henige, D. 1974
The Chronology of Oral Tradition: Quest for a Chimera. Oxford: Clarendon Press.
- Hennessy, J., K.O. Eriksson, and I.C. Kehrberg 1988
Ayia Paraskevi and Vasilia. Excavations by J.R.B. Stewart. Göteborg: P. Åströms Förlag, SIMA 82.
- Hertz, R. 1960
Death and the Right Hand. Glencoe, IL: Free Press.
- Herva, V-S 2005
 'The life of buildings: Minoan building deposits in an ecological perspective.' *Oxford Journal of Archaeology* 24: 215-27.
- Herzfeld, M. 1984
 'The horns of the Mediterranean dilemma.' *American Ethnologist* 11: 439-54.
- Herzfeld, M. 1991
A Place in History: Social and Monumental Time in a Cretan Town. Princeton: Princeton University Press.
- Herzfeld, M. 2003
 'Whatever happened to 'influence'? The anxieties of memory.' *Archaeological Dialogues* 10: 191-203.
- Hietala, H.J. (ed.) 1984

- Intrasite Spatial Analysis*. Cambridge: Cambridge University Press.
- Higgs, E. S. and M. Jarman 1975
 'Palaeoeconomy.' In Higgs, E.S. and M. Jarman (eds.) *Palaeoeconomy*, pp. 1-7. Cambridge: Cambridge University Press.
- Higuchi, T. 1989
The Visual and Spatial Structure of Landscapes. Cambridge, MA: MIT Press.
- Hill, J.D. 1995
Ritual and Rubbish in the Iron Age of Wessex. Oxford: British Archaeological Reports: 242.
- Hillier, B. and J. Hanson 1984
The Social Logic of Space. Cambridge: Cambridge University Press.
- Hirsch, E. 1995
 'Landscape: between place and space.' In Hirsch, E. and M. O'Hanlon (eds.) *The Anthropology of Landscape: Perspectives on Place and Space*, pp. 1-30. Oxford: Clarendon Press.
- Hirsch, E. and M. O'Hanlon (eds.) 1995
The Anthropology of Landscape: Perspectives on Place and Space. Oxford: Clarendon Press.
- Hobsbawm, E. and T. Ranger (eds.) 1983
The Invention of Tradition. Cambridge: Cambridge University Press.
- Hodder, I. 1985
 'Post-processual archaeology.' In Schiffer, M.B. (ed.) *Advances in Archaeological Method and Theory*, vol. 8, pp. 1-26. London: Academic Press.
- Hodder, I. 1986
Reading the Past: Current Approaches to Interpretation in Archaeology. Cambridge: Cambridge University Press.
- Hodder, I. 1990
The Domestication of Europe. London: Basil Blackwell.
- Hodder, I. (ed.) 1992
Archaeological Theory in Europe. The Last Three Decades. London: Routledge.
- Hodder, I. 1993
 'The narrative and rhetoric of material culture sequences.' *World Archaeology* 25: 268-282.
- Hodder, I. 1995
 'Material culture in time'. In Hodder, I. et al. (eds.) *Interpreting Archaeology. Finding Meaning in the Past*, pp. 164-8.
- Hodder, I. 1997
 'Always momentary, fluid and flexible: towards a self-reflexive excavation methodology.' *Antiquity* 71: 691-700
- Hodder, I. 1999
The Archaeological Process. An Introduction. Oxford: Blackwell.
- Hodder, I. 2006
 'Memory.' Hodder, I. (ed.) *Çatalhöyük Perspectives: Themes from the 1995-99 Seasons*. Cambridge: McDonald Institute for Archaeological Research.
- Hodder, I. and C. Cessford 2004
 'Daily practice and social memory at Çatalhöyük.' *American Antiquity* 69: 17-40.
- Holtorf, C. 1996
 'Towards a chronology of megaliths: understanding monumental time and cultural memory.' *Journal of European Archaeology* 4: 119-152.

- Holtorf, C. 1998
 'The life-histories of megaliths in Mecklenburg-Vorpommern (Germany).' *World Archaeology* 30: 23-38.
- Holtorf, C. 2002
 'Notes on the life history of a pot sherd.' *Journal of Material Culture* 7: 49-71.
- Horden P. and N. Preceul 2000
The Corrupting Sea: A Study of Mediterranean History. Oxford: Blackwell.
- Hoskins, J. 1998
Biographical Objects: How Things Tell the Stories of People's Lives. London: Routledge.
- Hudson, R. 1979
 'Space, place, and placelessness: some questions concerning methodology.' *Progress in Human Geography* 3: 169-173.
- Hutton, P. 1988
 'Collective memory and collective mentalities.' *Historical Reflections* 15: 311-22.
- Hutton, P. 1993
History as an Art of Memory. Hanover: University of Vermont Press.
- Huyssen, A. 1995
Twilight Memories: Marking Time in a Culture of Amnesia. London: Routledge.
- Ingold, T. 1985
 'The temporality of the landscape.' *World Archaeology* 25: 152-74.
- Ingold, T. 1995a
 'Work, time and industry.' *Time and Society* 4: 5-28.
- Ingold, T. 1995b
 'Building, dwelling, living: how animals and people make themselves at home in the world.' In Strathern, M. (ed.) *Shifting Contexts: Transformations in Anthropological Knowledge*, pp. 57-80. London: Routledge.
- Ingold, T. 2000a
The Perception of the Environment. Essays in Livelihood, Dwelling and Skill. London and New York: Routledge.
- Ingold, T. 2000b
 'Ancestry, generation, substance, memory, land.' In Ingold, T. *The Perception of the Environment. Essays in Livelihood, Dwelling and Skill*, pp.132-151. London: Routledge.
- Ingold, T. 2000d
 'To journey along a way of life. Maps, wayfinding and navigation.' In Ingold, T. *The Perception of the Environment. Essays in Livelihood, Dwelling and Skill*, pp.219-42. London: Routledge.
- Ingold, T. 2001a
 'Making culture and weaving the world.' In Graves-Brown, P.M. (ed.) *Matter, Materiality and Modern Culture*, pp. 50-71. London: Routledge.
- Ingold, T. 2001b
 'From the transmission of representations to the education of attention.' In Whitehouse, H. (ed.) *The Debated Mind. Evolutionary Psychology versus Ethnography*, pp. 113-153. Oxford and New York: Berg.
- Isbell, W.H. 2000
 'What we should 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*, pp. 243-66. London: Routledge.
- Jackson, A. 2003

- Interpreting Artefactual Deposition in East Mediterranean and Near Eastern Archaeology.*
PhD Thesis, University of Edinburgh.
- Jackle, J.A. 1987
The Visual Elements of Landscape. Amherst: University of Massachusetts Press.
- Johnson-Laird, P. 1988
The Computer and the Mind. London: Fontana.
- Johnston, R.J. 1991 (4th edition)
Geography and Geographers. Anglo-American Human Geography since 1945. London: Edward Arnold.
- Joyce, R.A. 2000
'Heirlooms and houses: materiality and social memory.' In Joyce, R.A. and Gillespie (eds.) *Beyond Kinship: Social and Material Reproduction in House Societies*, pp. 189-212. Philadelphia: University Of Pennsylvania Press.
- Joyce, R.A. 2003
'Concrete memories: fragments of the past in the Classic Maya present 9500-1000 AD). In Van Dyke, R.M. and S.E Alcock (eds.) *Archaeologies of Memory*, pp. 104-125. Oxford: Blackwell.
- Joyce, R. and Gillespie, S.D. (eds.) 2000a
Beyond Kinship. Social and Material Reproduction in House Societies. Philadelphia: University of Pennsylvania Press.
- Joyce, R. and Gillespie, S.D. 2000b
'Beyond kinship. An introduction.' In Joyce, R. and Gillespie, S.D (eds.) *Beyond Kinship. Social and Material Reproduction in House Societies*, pp.1-21. Philadelphia: University of Pennsylvania Press.
- Joyce, R. and J.A. Hendon 2000
'Heterarchy, history, and material reality. 'Communities' in Late Classic Honduras.' In Canuto, M.A. and J. Yaeger (eds.) *The Archaeology of Communities. A New World Perspective*, pp. 143-60. London and New York: Routledge.
- Joyce, A.R. and J. Lopiparo 2005
'Postscript: Doing agency in archaeology.' *Journal of Archaeological Method and Theory* 12: 365-74.
- Kamp, K. 2000
'From village to tell. Household ethnoarchaeology in Syria.' *Near Eastern Archaeology* 63: 84-93.
- Karageorghis, V. and M. Demas 1988
Excavations at Maa-Palaeokastro 1979-1986. Nicosia.
- Keates, S. 2000
'The ancestralisation of the landscape: monumentality, memory and the rock art of the Copper Age Valcamonica.' In Nash, G. (ed.) *Signifying Place and Space*, pp. 85-102. Oxford: BAR.
- Kenny, M.G. 1999
'A place for memory: the interface between individual and collective history.' *Comparative Studies in Society and History* 41: 420-37.
- Kent, S. 1984
Analysing Activity Areas. Albuquerque: University of New Mexico Press.
- Kent, S. 1990a
'A cross-cultural study of segmentation, architecture and the use of space.' In Kent, S. (ed.) *Domestic Architecture and the Use of Space*, pp. 127-32. Cambridge: Cambridge University Press.

- Kent, S. (ed.) 1990b
Domestic Architecture and the Use of Space. An Interdisciplinary Cross-Cultural Study.
 Cambridge: Cambridge University Press.
- Kent 1993
 'Ethnoarchaeology and the concept of home: a cross-cultural analysis.' In Benjamin, D. and D. Stea (eds.) *The Home: Interpretations, Meanings, and Environments*, pp. 163-81. Aldershot: Avebury Press.
- Keswani, P.S. 2004
Mortuary Ritual and Society in Bronze Age Cyprus. London and Oakville: Equinox.
- Kirch, P.V. 2000
 'Temples as 'holy houses'. The transformation of ritual architecture in traditional Polynesian societies.' In Joyce, R.A. and Gillespie (eds.) *Beyond Kinship: Social and Material Reproduction in House Societies*, pp. 103-14. Philadelphia: University Of Pennsylvania Press.
- Kirmayer, L.J. 1996
 'Landscapes of memory: trauma, narrative and dissociation.' In Antze, P. and M. Lambek (eds.) *Tense Past: Cultural Essays on memory and Trauma.* Pp. 173-198. London: Routledge.
- Kitchin, R. and S.M. Freundschuh (eds.) 2000
Cognitive Mapping: Past, Present and Future. London: Routledge.
- Knapp, A.B. (ed.) 1992
Archaeology, Annales, and Ethnohistory. Cambridge: Cambridge University Press.
- Knapp, A.B. 1993
 'Social complexity: incipience, emergence, and development on prehistoric Cyprus.' *BASOR* 292: 85-104.
- Knapp, A.B. 1994
 'Emergence, development and decline on Bronze Age Cyprus.' In Mathers, C. and S. Stoddart (eds.) *Development and Decline in the Mediterranean Bronze Age*, pp. 271-304. Sheffield: Sheffield Archaeological Monographs 8.
- Knapp, A.B. 1999
 'Ideational and Industrial Landscape on Prehistoric Cyprus.' In Ashmore, W. and A.B. Knapp (eds.) *Archaeologies of Landscape. Contemporary Perspectives*, pp. 229-252. Oxford: Blackwell.
- Knapp, A.B., S.O. Held, and S. Manning 1994
 'The Prehistory of Cyprus: problems and prospects.' *Journal of World Prehistory* 8: 377-453.
- Knapp, A.B. and L. Meskell 1997
 'Bodies of evidence on prehistoric Cyprus.' *Cambridge Archaeological Journal* 7: 183-204.
- Knapp, A.B. and W. Ashmore 1999
 'Archaeological landscapes: constructed, conceptualised, ideational.' In Ashmore, W. and A.B. Knapp (eds.) *Archaeologies of Landscape. Contemporary Perspectives*, pp. 1-30. Oxford: Blackwell.
- Knapp, A.B. and E. Blake 2005
 'Prehistory in the Mediterranean: the connecting and corrupting sea.' In Blake, E. and A.B. Knapp (eds.) *The Archaeology of Mediterranean Prehistory*, pp.1-23. Oxford: Blackwell.
- Knappett, C. 2002
 'Photographs, skeuomorphs and marionettes.' *Journal of Material Culture* 7: 97-117.

- Kolb, C. 1985
 'Demographic estimates in archaeology: contributions from ethnoarchaeology on Mesoamerican peasants.' *Current Anthropology* 26: 581-99.
- Kopytoff, I. 1986
 'The cultural biography of things: commoditisation as process'. In Appadurai, A. (ed.) *The Social Life of Things: Commodities in Cultural Perspective*, pp. 65-91.
- Kotre, J. 1995
White Gloves: How We Create Ourselves Through Memory. New York: The Free Press.
- Kramer, C. 1982
Village Ethnoarchaeology: Rural Iran in Archaeological Perspective. New York: Academic Press.
- Kühler, S. 1987
 'Malangan: art and memory in a Melanesian society.' *Man* 22: 238-255.
- Kühler, S. 1988
 'Malangan: Objects, sacrifice and the production of memory.' *American Ethnologist* 15: 625-637.
- Kühler, S. 1993
 'Landscape as memory: the mapping of process and its representation in a Melanesian society.' In Bender, B. (ed.) *Landscape: Politics and Perspectives*, pp. 85-106. Oxford and Providence: Berg.
- Kühler, S. 1999
 'The place of memory.' In Forty, A. and S. Kühler (eds.) *The Art of Forgetting*, pp. 53-73. Oxford: Berg.
- Kühler, S. and W. Melion (eds.) 1991
Images of Memory. On Remembering and Representation. Washington, DC: Smithsonian Institution Press.
- Kuijt, I. 1996
 'Negotiating equality through ritual: a consideration of Late Natufian and pre-pottery Neolithic A period mortuary practices.' *Journal of Anthropological Archaeology* 15: 313-336.
- Kuijt, I. 2000
 'People and space in early agricultural villages: exploring daily lives, community size, and architecture in the Late Pre-Pottery Neolithic.' *Journal of Anthropological Archaeology* 19: 75-102.
- Kuijt, I. and N. Goring-Morris 2002
 'Foraging, farming, and social complexity in the Pre-Pottery Neolithic of the Southern Levant: A review and synthesis.' *Journal of World Prehistory*: 16: 361-440.
- Kus, S. and V. Raharijaona 1990
 'Domestic space and the tenacity of tradition among some Betsileo of Madagascar.' In Kent, S. (ed.) *Domestic Architecture and the Use of Space. An Interdisciplinary Cross-Cultural Study*, pp. 21- 33. Cambridge: Cambridge University Press.
- Lake, M. 1998
 'Digging for memes: the role of material objects in cultural evolution.' In Renfrew, C. and C. Scarre *Cognition and Material Culture: the Archaeology of Symbolic Storage*, pp. 77-88. Cambridge: McDonald Institute Monographs.
- Lake, M.W. and P.E. Woodman 2003
 'Visibility studies in archaeology: a review and case study.' *Environment and Planning B: Planning and Design* 30: 689-707.
- Lakoff, G. and M. Johnson 1980

- Metaphors We Live By*. Chicago: Chicago University Press.
- Lambek, M. 1996
 'The past imperfect. Remembering as moral practice.' In Antze, P. and M. Lambek (eds.) *Tense Past: Cultural Essays on Trauma and Memory*, pp. 235-54. London and New York: Routledge.
- Lambek, M. and P. Antze 1996
 'Introduction: Forecasting memory.' In Antze, P. and M. Lambek (eds.) *Tense Past: Cultural Essays on Trauma and Memory*, pp. 1-24. London and New York: Routledge.
- LaMotta, V. and M.B. Schiffer 1999
 'Formation process of house floor assemblages.' In Allison, P.M. (ed.) *The Archaeology of Household Activities*, pp. 19-29. London: Routledge.
- Landsberg, A. 1995
 'Prosthetic memory: *Total Recall* and *Blade Runner*.' In Featherstone, M. and R. Burrows (eds.) *Cyberspace/Cyberbodies/Cyberpunk: Cultures of Technological Embodiments*. London: Sage.
- Lane, P. 1994
 'The temporal structuring of settlement space among the Dogon of Mali: an Ethnoarchaeological study.' In Parker-Pearson, M. and C. Richards (eds.) *Architecture and Order: Approaches to Social Space*, 196-216. London: Routledge.
- Lane, P. 2005
 'The material culture of memory.' In James, W. and D. Mills (eds.) *The Qualities of Time: Anthropological Approaches*, pp. 19-34. Oxford and New York: Berg.
- Laslett, P. (ed.) 1972
Household and Family in Past Time. Cambridge: Cambridge University Press.
- Last, J. 1995
 'The nature of history.' In Hodder, I., M. Shanks, A. Alexandri, V. Buchli, J. Carman, J. Last and G. Lucas (eds.) *Interpreting Archaeology. Finding Meaning in the Past*, pp.141-57. London: Routledge.
- Latour, B. 1991
We Have Never Been Modern. New York: Harvester Wheatsheaf.
- Latour, B. 1992
 'Sociology of a few mundane artefacts.' In Bijker and J. Law (eds.) *Shaping Technology, Building Society: Studies in Sociotechnical Change*. Cambridge, MA: MIT Press.
- Lawrence, D. and S. Low 1990
 'The built environment and spatial form.' *Annual Reviews in Anthropology* 19: 453-505.
- Lawson, B. 2001
The Language of Space. Oxford: Architectural Press.
- Le Brun, A. 1981
 'Remarques sur l'utilisation de l'espace à Khirokitia et au Cap Andreas-Kastros (Chypre).' In J. Cauvin and P. Sanlaville (eds.) *Préhistoire du Levant*, pp. 457-66. Paris.
- Le Brun, A. 2001
 'At the other end of the sequence: the Cypriot Aceramic as seen from Khirokitia.' In Swiny, S. (ed.) *The Earliest Prehistory of Cyprus: From Colonisation to Exploitation*, pp. 109-118. Boston: CAARI Monographs, vol. 2.
- Le Brun, A. 2002

- 'Neolithic society in Cyprus: a tentative analysis.' In Bolger, D. and N. Serwint (eds.) *Engendering Aphrodite. Women and Society in Ancient Cyprus*, pp. 23-32. Boston: American Schools of oriental Research, CAARI Monographs, Vol. 3.
- Le Brun, A. 2005
'Like a bull in a china shop: identity and ideology in Neolithic Cyprus.' In Clarke, J. (ed.) *Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean*, pp. 113-17. Oxford: Levant Supplementary Series, Vol. 2.
- Le Brun, A. *et al.* 1981
Un Site Néolithique Précéramique en Chypre: Cap Andreas-Kastros. Paris: Éditions A.D.P.F.
- Le Brun, A. *et al.* 1984
Fouilles Récentes à Khirokitia (Chypre) 1977-1981. Paris: Editions Recherches sur le Civilisations.
- Le Brun, A. *et al.* 1989
Fouilles Récentes à Khirokitia (Chypre) 1983-1985. Paris: Editions Recherches sur le Civilisations.
- Le Brun, A. *et al.* 1994
Fouilles Récentes à Khirokitia (Chypre) 1988-1991. Paris: Editions Recherches sur le Civilisations.
- Le Goff, J. 1992
History and Memory, trans. by S. Rendall and E. Claman. New York: Columbia University Press.
- Lehavy, Y.M. 1989
'Excavations at Dhali-Agridhi: 1972, 1974, 1976. Dhali-Agridhi: The Neolithic by the river.' In Stager, L.E. and A.M. Walker (eds.) *American Expedition to Idalion, Cyprus 1973-1980*, pp. 103-43. Chicago: Oriental Institute of the University Chicago.
- Levi-Strauss, C. [1962] 1966
The Savage Mind. London: Weidenfeld & Nicholson.
- Lévi-Strauss, C. [1975] 1983
The Way of the Masks. (trans. S. Modelski). London: Jonathan Cape.
- Lévi-Strauss, C. 1987
Anthropology and Myth: Lectures 1951-1982. (transl. by R. Willis). Oxford: Blackwell.
- Lightfoot, R.R 1993
'Abandonment processes in prehistoric pueblos.' In Cameron, C.M. and S.A. Tomka (eds.) *Abandonment of Settlements and Regions. Ethnoarchaeological and archaeological perspectives*, pp. 165-177. Cambridge: Cambridge University Press.
- Lilios, K.T. 2003
'Creating memory in prehistory: the engraved slate plaques of Southwest Iberia.' In Van Dyke, R.M. and S.E. Alcock (eds.) *Archaeologies of Memory*, pp. 130-150. Oxford: Blackwell.
- Lock, G. (ed.) 2000
Beyond the Map: Archaeology and Spatial Technologies. Amsterdam: IOS Press.
- Lowenthal, D. 1975
'Past time, present time: landscape and memory.' *Geographical Review* 65: 249-257.
- Lowenthal, D. 1985
The Past is a Foreign Country. Cambridge: Cambridge University Press.
- Lowenthal, D. 1996
Possessed by the Past: The Heritage Crusade and the Spoils of History. New York: The Free Press.

- Loyd, R. 1994
 'Learning spatial prototypes.' *Annals of the Association of American Geographers* 84: 418-40.
- Lynch, K. 1960
The Image of the City. Cambridge, MA: MIT Press.
- Lynch, K. 1972
What Time is This Place? Cambridge: MIT Press.
- Manning, S. 1993
 'Prestige, distinction and competition. The authority of socio-economic complexity in 4th to 2nd millennium BCE. *BASOR* 292:35-38.
- Manning, S. 1994
 'The emergence of divergence: development and decline on Bronze Age Crete and the Cyclades.' In Mathers, C. and S. Stoddart (eds.) *Development and Decline in the Mediterranean Bronze Age*, pp. 221-70. Sheffield: Sheffield Archaeological Monograph 8, John Collins Publications.
- Manning, S. and S. Swiny 1994
 'Sotira-Kamminoudhia and the chronology of the Early Bronze Age in Cyprus.' *Oxford Journal of Archaeology* 13: 149-72.
- Marcus, J. 2000
 'Toward an archaeology of communities.' In Canuto, A. and J. Yaeger (eds.) *The Archaeology of Communities. A New World Perspective*, pp. 231-42. London: Routledge.
- Marshack, A. 1972
The Roots of Civilisation: The Cognitive Beginnings of Man's First Art, Symbol and Notation. New York: McGraw-Hill.
- Mathers, C. and S. Stoddart (eds.) 1994
Development and Decline in the Mediterranean Bronze Age. Sheffield: Sheffield Archaeological Monograph 8, John Collins Publications.
- Matthews, W. 1996
 'Multiple surfaces: the micromorphology.' In Hodder, I. (ed.) *On the Surface: Çatalhöyük 1993-95*, pp. 301-342. Cambridge: McDonald Institute Monographs and British Institute of Archaeology at Ankara.
- Matthews, W. 2005a
 'Micromorphological and microstratigraphic traces of uses and concepts of space.' In Hodder, I. (ed.) *Inhabiting Çatal Hüyük: reports from the 1995-1999 seasons*, pp. 355-398. Cambridge: McDonald Institute for Archaeological Research.
- Matthews, W. 2005b
 'Life-cycle and life-course of buildings.' In Hodder, I. (ed.) *Çatalhöyük Perspectives: Themes from the 1995-99 Seasons*, pp. 125-149. Cambridge: McDonald Institute for Archaeological Research.
- Maturana, H. and F. Varela 1987
The Tree of Knowledge: The Biological Roots of Human Understanding. New Science Library.
- Matzourani, E. 1994
 'Ekthesi apotelespaton tis anaskafis sti thesi Kantou-Kouphovounos.' *RDAC* 1994: 1-29.
- Matzourani, E. 1996
 'Ekthesi apotelesmaton tis anaskafis sti thesi Kantou-Kouphovounos kata tis periodous 1994-1995.' *RDAC* 1996: 1-28.
- McCartney, C. 2004

- 'Cypriot Neolithic chipped stone industries and the progress of regionalisation.' In Peltenburg, E. and A. Wasse (eds.) *Neolithic Revolution: New Perspectives on Southwest Asia in Light of Recent Discoveries on Cyprus*, pp. 103-22. Oxford: Levant Supplementary Series, Vol. 1.
- McCartney, C. 2006
 'The meaning of context: changing interpretations of the Cypriot Aceramic Neolithic.' In Papaconstantinou, D. (ed.) *Deconstructing Context. A Critical Approach to Archaeological Practice*, pp. 99-119. Oxford: Oxbow Books.
- Meining, D. (ed.) 1979a
The Interpretation of Ordinary Landscapes: Geographical Essays. Oxford: Oxford University Press.
- Meining, D. 1979b
 'Introduction' In Meining, D. (ed.) *The Interpretation of Ordinary Landscapes: Geographical Essays*, pp. 1-7. Oxford: Oxford University Press.
- Mellaart, J. 1966
 'Excavations at Çatal Hüyük, fourth preliminary report, 1965.' *Anatolian Studies* 16: 15-191.
- Mellars, P.A. and K. Gibson (eds.) 1996
Modelling the Early Human Mind. Cambridge: McDonald Institute for Archaeological Research.
- Mellink, M. 1991
 'Anatolian contacts with Chalcolithic Cyprus.' *BASOR* 282/283: 167-75
- Merleau-Ponty, M. 1962 [1945]
Phenomenology of Perception. London: Routledge.
- Meskell, L. 1996
 'The somatisation of archaeology: institutions, discourses, corporeality.' *Norwegian Archaeological Review* 29: 1-16.
- Meskell, L. (ed.) 1998
Archaeology under Fire: Nationalism, Politics and Heritage in the Eastern Mediterranean and Middle East. London: Routledge.
- Meskell, L. 2003
 'Memory's materiality: Ancestral presence, commemorative practice and disjunctive locales.' In Van Dyke, R.M. and S.E. Alcock (eds.) *Archaeologies of Memory*, pp. 34-53. Oxford: Blackwell.
- Metcalf, P. and R. Huntington (eds) 1991
Celebrations of Death. Cambridge: Cambridge University Press.
- Middleton, D. and D. Edwards (eds.) 1990
Collective Remembering. London: Sage.
- Misztal, B.A. 2003
Theories of Social Remembering. Maidenhead: Open University Press.
- Mithen, S. 1996
The Prehistory of the Mind. A Search for the Origins of Art, Religion and Science. London: Thames and Hudson.
- Mithen, S. 2000
 "Mind, brain and material culture: an archaeological perspective." Carruthers, P. and A. Chamberslain (eds.) *Evolution and the human mind: Modularity, language and meta-cognition*, pp. 207-217. Cambridge: Cambridge University Press.
- Montgomery, B.K. 1993

- 'Ceramic analysis as a tool for discovering processes of pueblo abandonment.' In Cameron, C.M. and S.A. Tomka (eds.) *Abandonment of Settlements and Regions. Ethnoarchaeological and archaeological perspectives*, pp. 157-64. Cambridge: Cambridge University Press.
- Moore, H. 1982
'The interpretation of spatial patterning in settlement residues.' In Hodder, I. (ed.) *Symbolic and Structural archaeology*, pp74-9. Cambridge: Cambridge University Press.
- Moore, H. 1986
Space, Text, and Gender. Cambridge: Cambridge University Press.
- Morris, D. 1985
The Art of Ancient Cyprus. Oxford: Phaidon.
- Morphy, H. 1991
Ancestral Connections. Chicago, Il: Chicago University Press.
- Morphy, H. 1995
'Landscape and the reproduction of the ancestral past.' In Hirsch, E. and M. O'Hanlon (eds.) *The Anthropology of Landscape*, pp. 184-209. Oxford: Clarendon.
- Munn, N. 1992
'The cultural anthropology of time.' *Annual Review of Anthropology* 21: 93-123.
- Naroll, R. 1962
'Floor area and settlement population.' *American Antiquity* 27: 587-99
- Neisser, U. 1982
'Memory: What are the important questions?' In Neisser, U. (ed.) *Memory Observed: Remembering in Natural Contexts*, 3-19. San Francisco: W.H. Freeman.
- Neisser, U. and E. Winograd (eds.) 1988
Remembering Reconsidered. Ecological and Traditional Approaches to the Study of Memory. Cambridge: Cambridge University Press
- Neisser, U. and I.E. Hyman (eds.) 2000 (2nd edition)
Memory Observed: Remembering in Natural Contexts. New York: Worth Publishers.
- Nelson, R.S. and M. Olin (eds.) 2003
Monuments and Memory. Made and Unmade. Chicago: University of Chicago Press.
- Netting, R., R.R. Wilk, and E.J. Arnold 1984
Households: Comparative and Historical Studies of the Domestic Group. Berkeley: University of California Press.
- Nora, P. 1989
'Between Memory and History.' (transl. by M. Roudebush) *Representations* 26: 7-25.
- Nora, P. (ed.) 1992a
Realms of Memory. Vols. 1-3, trans. A. Goldhammer. New York: Columbia University Press
- Nora, P. 1992b
'Introduction. Between Memory and History.' In Nora, P. (ed.) *Realms of Memory*. Vol. 1, pp. 1-20. trans. by A. Goldhammer. New York: Columbia University Press
- Nowell, A. 2001
'The re-emergence of cognitive archaeology.' In Nowell, A. (ed.) *In the Mind's Eye. Multidisciplinary Approaches to the Evolution of Human Cognition*, pp. 20-32. Ann Arbor: International Monographs in Prehistory. Archaeological Series 13.
- O'Keefe, J. and L. Nadel 1978
The Hippocampus as a Cognitive Map. Oxford: Oxford University Press.
- Olick, J.K. and D. Levy 1997

- 'Collective Memory and cultural constraint: Holocaust myth and rationality in German politics.' *American Sociological Review* 62: 927-36.
- Olick, J.K. and J. Robbins 1998
 'Social memory studies: from 'collective memory' to the historical sociology of mnemonic practices.' *Annual Review of Sociology* 24: 105-40.
- Olson, D.R. 1994
The World on Paper: the Conceptual and Cognitive Implications of Writing and Reading. Cambridge: Cambridge University Press.
- Ong, W.J. 1982
Orality and Literacy: The Technologizing of the Work. London: Methuen.
- Orwell, G. 1954
Nineteen Eighty-Four. London: Penguin.
- Oyama, S. 1985
The Ontogeny of Information. Cambridge: Cambridge University Press.
- Papaconstantinou, D. 2002
 'Life cycles and the dynamics of domestic architecture: households in Neolithic Cyprus.' In Bolger, D. and N. Serwint (eds.) *Engendering Aphrodite. Women and Society in Ancient Cyprus*, pp. 33-47. Boston: American Schools of oriental Research, CAARI Monographs, Vol. 3.
- Papaconstantinou, D. 2005
Identifying Domestic Space in Neolithic Eastern Mediterranean: Method and Theory in Spatial Studies. Oxford: British Archaeological Reports.
- Papaconstantinou, D. 2006
Identifying Domestic Space in the Neolithic Eastern Mediterranean: Method and Theory in Spatial Studies. Oxford: BAR Int. Series; 1480.
- Pardo, M. 1991
 'Memory, imagination, figuration: Leonardo da Vinci and the painter's mind.' In Kühler, S. and W. Melion (eds.) *Images of Memory. On Remembering and Representation*, pp. 47-73. Washington, DC: Smithsonian Institution Press.
- Parker, R.D. 1997
 'The architectonics of memory: on built form and built thought.' *Leonardo* 30: 147-52.
- Parker-Pearson, M. and C. Richards (eds.) 1994a
Architecture and Order: Approaches to Social Space. London: Routledge.
- Parker-Pearson, M. and C. Richards 1994b
 'Ordering the world: perceptions of architecture, space and time.' In Parker-Pearson, M. and C. Richards (eds.) *Architecture and Order: Approaches to Social Space*, pp. 1-37. London: Routledge.
- Patrik, L. 1985
 'Is there an archaeological record?'" In Schiffer, M.B. (ed.) *Advances in Archaeological Method and Theory*, Vol. 8, pp. 27-62. Academic Press.
- Pauketat, T.R. 2001
 'Practice and history in archaeology: an emerging paradigm.' *Anthropological Theory* 1: 73-98.
- Peltenburg, E. J. 1972
 'Interim Report on the excavations at Ayios-Epiktitos-Vrysi in 1969 and 1971.' *RDAC* 1972: 1-14.
- Peltenburg, E.J. 1975
 'Ayios Epiktitos-Vrysi, Cyprus: preliminary results of the 1969-1973 excavations of a Neolithic coastal settlement.' *Proceedings of the Prehistoric Society* 41: 17-45.

- Peltenburg, E.J. 1978
 'The Sotira culture: regional diversity and cultural unity in Late Neolithic Cyprus.' *Levant* 10: 55-74.
- Peltenburg, E.J. 1979
 'The prehistory of west Cyprus: Ktima Lowlands investigations 1976-78. *RDAC* 1979: 69-99.
- Peltenburg 1982a
Recent Developments in the later Prehistory of Cyprus. Göteborg: SIMA.
- Peltenburg, E.J. 1982b
Vrysi: A Subterranean Settlement in Cyprus. Excavations at Prehistoric Ayios Epiktitos Vrysi, 1969-73. Warminster.
- Peltenburg, E.J. 1985
 'Pattern and purpose in the prehistoric Cypriot village of Ayios Epiktitos Vrysi.' In *Chypre. La Vie Quotidienne de l'Antiquité à nos Jours*, pp. 46-64. Paris: Musée de l'Homme.
- Peltenburg, E.J. 1988
 'A Cypriot model for prehistoric ritual.' *Antiquity* 62: 288-93.
- Peltenburg, E.J. 1989
 'The beginnings of religion in Cyprus.' In Peltenburg, E.J. (ed.) *Early Society in Cyprus*, pp. 108-26. Edinburgh: Edinburgh University Press.
- Peltenburg, E. 1990
 'Figurines in a bowl: evidence for Chalcolithic religion from Kissonerga-Mosphilia.' *Archaeologia Cypria* 2: 25-31.
- Peltenburg, E. 1991a
 'Kissonerga-Mosphilia: a major Chalcolithic site in Cyprus.' *BASOR* 282/283: 17-36.
- Peltenburg, E. 1991b
 'Local exchange in Cyprus: an initial assessment of picrolite.' *BASOR* 282/283: 107-126.
- Peltenburg, E. 1993
 'Settlement discontinuity and resistance to complexity in Cyprus, ca. 4500-2500. B.C.E.' *BASOR* 292: 9-23.
- Peltenburg, E. 1994
 'Constructing authority: the Vounous enclosure model.' *Opuscula Atheniensia* XX: 10: 158-62.
- Peltenburg, E. 1996
 'From isolation to state formation in Cyprus, c. 3500-1500 B.C.' In Karageorghis, V. and D. Michaelides (eds.) *The Development of the Cypriot Economy from the Prehistoric Period to the Present Day*. Nicosia.
- Peltenburg, E. 2002
 'Gender and social structure in prehistoric Cyprus: A case study from Kissonerga.' In Bolger, D. and N. Serwint (eds.) *Engendering Aphrodite: Women and Society in Ancient Cyprus*, pp. 53-66. Boston: ASOR, CAARI Monographs, vol. 3.
- Peltenburg, E. 2003
 'Incorporated houses, memory and identity in prehistoric Cyprus: inferences from Ayios Epiktitos-Vrysi.' In Guilaine, J. and A. LeBrun (eds.) *Le Néolithique de Chypre*, pp. 1-15.
- Peltenburg, E. 2004
 'Social space in early sedentary communities of Southwest Asia and Cyprus.' In Peltenburg, E. and A. Wasse (eds.) *Neolithic Revolution: New Perspectives on Southwest*

- Asia in Light of Recent Discoveries on Cyprus*, pp. 71-89. Oxford: Levant Supplementary Series, Vol. 1.
- Peltenburg, E.J. *et al.* 1983
 'The prehistory of West Cyprus: Ktima Lowlands investigations. *RDAC* 1983: 9-55.
- Peltenburg, E.J. *et al.* 1985
Lemba Archaeological Project I. Excavations at Lemba-Lakkous, 1976-1983. . Göteborg: P. Åströms Förlag, SIMA 70:1.
- Peltenburg, E.J. *et al.* 1991
Lemba Archaeological Project II.2. A Ceremonial Area at Kissonerga. Göteborg: P. Åströms Förlag, SIMA 70: 3.
- Peltenburg, E.J. *et al.* 1998
Lemba Archaeological Project II.1A. Excavations at Kissonerga-Mosphilia 1977-1995. Jonsered: P. Åströms Förlag, SIMA 70:2.
- Peltenburg, E., *et al.* 2000
 'Agropastoralist colonisation of Cyprus in the 10th millennium BP: initial assessments.' *Antiquity* 74: 844-53.
- Peltenburg, E., *et al.* 2001a
 'Neolithic dispersals from the Levantine Corridor: a Mediterranean perspective.' *Levant* 33: 35-64.
- Peltenburg, E. *et al.* 2001b
 'Well established colonists: Mylouthkia 1 and the Cypro-Pre-Pottery Neolithic B.' In Swiny, S. (ed.) *The Earliest Prehistory of Cyprus: From Colonisation to Exploitation*, pp. 61-93. Boston: CAARI Monographs, vol. 2.
- Peltenburg, E. *et al.* 2003
Lemba Archaeological Project, Cyprus III.1. Excavations at Kissonerga-Mylouthkia 1977-1995. Sävedalen: P. Åströms Förlag,
- Peltenburg, E. and A. Wasse (eds.) 2004
Neolithic Revolution. New Perspectives on Southwest Asia in Light of Recent Discoveries on Cyprus. Oxford: Levant Supplementary Series Vol. 1.
- Peltenburg, E. and S. Spanou 1999
 'The painted pottery from Ayios Epiktitos-Vrysi.' *RDAC* 1999: 13-44.
- Pennebaker, J.W., D. Paez, and B. Rime (eds.) 1997
Collective Memory of Political events. Mahwah, NJ: Lawrence Erlbaum.
- Penn, A. 2003
 'Space syntax and spatial cognition. Or why the axial line?' *Environment and Behavior* 35: 30-65.
- Pfälzner, R. 1996
 'Activity areas and the social organisation of third millennium B.C. households.' In Veenhof, K.R. (ed.) *Houses and Households in Ancient Mesopotamia*, pp. 117-27. Istanbul: Nederlands Historisch Archaeologisch Instituut te Istanbul.
- Pillemer, D.B. 1998
Momentous Events. Vivid Memories. Cambridge, Mass.: Harvard university Press.
- Pine, F., D. Kaneff and H. Haukanes 2004a
 'Introduction. Memory, Politics and Religion: A Perspective on Europe.' In Pine, F., D. Kaneff and H. Haukanes (eds.) *Memory, Politics and Religion. The Past Meets the Present in Europe*, pp. 1-29. Münster: LIT Verlag.
- Pine, F., D. Kaneff and H. Haukanes (eds.) 2004b
Memory, Politics and Religion. The Past Meets the Present in Europe. Münster: LIT Verlag.

- Plotkin, H. 2002
The Imagined Culture Made Real. Toward a Natural Science of Culture. London: Penguin.
- Pluciennik, M. 1999
 'Archaeological narratives and other ways of telling.' *Current Anthropology* 40: 653-678.
- Pollard, J. 1999
 'These places have their moments': thoughts on settlement practices in the British Neolithic.' In Brück, J. and M. Goodman (eds.) *Making Places in the Prehistoric World: Themes in Settlement Archaeology*, pp. 76-93. Cambridge: Cambridge University Press.
- Prager, J. 1998
Presenting the Past: Psychoanalysis and the Sociology of Misremembering. Cambridge, MA: Harvard University Press.
- Pred, A. 1984
 'Places as historically contingent process: structuration and the time-geography of becoming places.' *Annals of the Association of American Geographers* 74: 279-297.
- Pred, A. 1990
Making Histories and Constructing Human Geographies: The Local Transformation of Practice, Power Relations and Consciousness. Boulder: Westview Press.
- Proust, M. 1966 [1913-1927]
In Search of Lost Time. Trans. C.K.S. Moncrieff, T. Kilamartin, and D.J. Enright. London: Vintage/Random House.
- Radstone, S. 2000
 'Working with memory; an introduction. In Radstone, S. (ed.) *Memory and Methodology*, pp. 1-22. Oxford: Berg.
- Rapoport, A. 1982
The Meaning of the Built Environment: a Non-Verbal Communication Approach. Beverly Hills, CA: Sage.
- Rapoport, A. 1989
House Form and Culture. Englewood Cliffs, N.J.: Prentice-Hall.
- Rapoport, A. 1990
 'Systems of activities and systems of settings.' In Kent, S. (ed.) *Domestic Architecture and the Use of Space*, pp. 9-20. Cambridge: Cambridge University Press.
- Ratner, C. 2001
 'Activity theory and cultural psychology.' In Moore, C.C. and H.F. Mathews (eds.) *The Psychology of Cultural Experience*, pp. 68-80. Cambridge: Cambridge University Press.
- Reade, J. (ed.) 1981
Chalcolithic Cyprus and Western Asia. London: British Museum Occasional Paper 26.
- Redfield, R. 1955
The Little Community: Viewpoints for the Study of a Human Whole. Chicago: Chicago University Press.
- Relph, E. 1981
Place and Placelessness. London: Pion.
- Renfrew, C. 1972
The Emergence of Civilisation: The Cyclades and the Aegean in the Third Millennium BC. London: Methuen.
- Renfrew, C. (ed.) 1973
The Explanation of Culture Change. London: Duckworth.
- Renfrew, C. 1986

- 'Varna and the emergence of wealth in prehistoric Europe.' In Appadurai, A. (ed.) *The Social Life of Things. Commodities in Cultural Perspectives*, pp. 141-68. Cambridge: Cambridge University Press.
- Renfrew, C. 1994
'Towards a cognitive archaeology.' In Renfrew, C. and E. Zubrow (eds.) *The Ancient Mind Elements of Cognitive Archaeology*, pp.1-12. Cambridge: Cambridge University Press.
- Renfrew, C. 1996
'The sapient paradox: how to test for potential?' In Mellars, P.A. and K. Gibson (eds.) *Modelling the Early Human Mind*, pp. 11-14. Cambridge: McDonald Institute for Archaeological Research.
- Renfrew, C. 1998
'Mind and matter: cognitive archaeology and external symbolic storage.' In Renfrew, C. and C. Scarre (eds.) *Cognition and Material Culture. The Archaeology of Symbolic Storage*, pp.1-6. Cambridge: McDonald Institute for Archaeological Research.
- Renfrew, C. and C. Scarre (eds.) 1998
Cognition and Material Culture. The Archaeology of Symbolic Storage. Cambridge: McDonald Institute for Archaeological Research.
- Richards, C. and J. Thomas 1984
'Ritual activity and structured deposition in later Neolithic Wessex.' In Bradley, R. and J. Gardiner (eds.) *Neolithic Studies*, pp. 189-218. Oxford: BAR.
- Ricoeur, P. 1984
Time and Narrative, vol. 1. (tranl. McLaughlin, K. and D. Pellauer). Chicago: Chicago University Press.
- Ricoeur, P. 1988
Time and Narrative, vol. 3. (tranl. McLaughlin, K. and D. Pellauer). Chicago: Chicago University Press.
- Ricoeur, P. 1999
'Memory and forgetting.' In Kearney, R. and M. Dooley (eds.) *Questioning Ethics*, pp. 5-12. London: Routledge.
- Ricoeur, P. 2004
Memory, History, Forgetting. Transl. K. Blamey and D. Pellauer. Chicago: University of Chicago Press.
- Rivière, P. 1995
'Houses, places and people: community and continuity in Guiana.' In Carsten, J. and S. Hugh-Jones (eds.) *About the House. Lévi-Strauss and Beyond*, pp. 189-205. Cambridge: Cambridge University Press.
- Rodman, C. M. 1985a
'Moving houses: residential mobility and the mobility of residences in Longana, Vanuatu.' *American Anthropologist* 87: 56-72.
- Rodman, C.M. 1985b
'Contemporary custom: redefining domestic space in Longana, Vanuatu.' *Ethnology* 24: 268-79.
- Roediger, H.L. 1980
'Memory metaphors in cognitive psychology.' *Memory and Cognition* 8: 231-46.
- Rose, S. 2003
The Making of Memory. From Molecules to Mind. (2nd edition) London: Vintage.
- Rosen, A.M. 1986
Cities of Clay: The Geoarchaeology of Tells. Chicago: Chicago University Press.

- Rowlands, M. 1993
 'The role of memory in the transmission of culture.' *World Archaeology* 25: 141-51.
- Rubin, D. (ed.) 1986
Autobiographical Memory. Cambridge: Cambridge University Press.
- Rubin, D. 1996
Remembering our Past. Studies in Autobiographical Memory. Cambridge: Cambridge University Press.
- Sacks, O.W. 1970
The Man Who Mistook his Wife for a Hat and Other Clinical Tales. New York: Harper Collins.
- Samuels, M. 1979
 'The biography of landscape.' In Meining, D. (ed.) *The Interpretation of ordinary Landscape*, pp. 51-88. Oxford: Oxford University Press.
- Schaar, K.W. 1985
 'House form at Tarsus, Alambra, and Lemba.' *RDAC*, 1985: 37-44.
- Schacter, D.L. 1996
Searching for Memory. New York: Basic Books.
- Schama, S. 1996
Landscape and Memory. New York: Vintage Books
- Schiffer, M.B. 1983
 'Toward the identification of formation processes.' *American Antiquity* 48: 675-706.
- Schiffer, M.B. 1985
 'Is there a 'Pompeii Premise' in archaeology?' *Journal of Anthropological Research* 41: 18-41.
- Schiffer, M.B. 1996
Formation Processes of the Archaeological Record. Salt lake City: University of Utah Press.
- Schmandt-Besserat, D. 1992
Before Writing. From Counting to Cuneiform. Austin: University of Texas Press.
- Schnapp, A. 1997
The Discovery of the Past. New York: Harry N. Abrams.
- Schudson, M. 1989
 'The present in the past versus the past in the present.' *Communication* 11: 105-13.
- Schutz, A. 1967
The Phenomenology of the Social World. Evanston, IL: Northwestern University Press.
- Schwartz, B. 1982
 'The social context of commemoration: a study in collective memory.' *Social Forces* 61 (2): 374-97.
- Seamon, D. and R. Mugerauer (eds.) 1985
Dwelling, Place and Environment: Towards a Phenomenology of Person and World. New York: Columbia University Press.
- Searle, J. 1984
Minds, Brains and Science. The 1984 Reith Lectures. London: British Broadcasting Corporation.
- Segal, W.H., D.T. Campbell, and M.J. Herskovits 1966
The Influence of Culture on Visual Perception. Indianapolis: Bobbs-Merrill.
- Seremetakis, N. 1996
The Senses Still. Boulder, CO: Westview Press.
- Şevketoğlu, M. 2000

- Archaeological Field Survey of the Neolithic and Chalcolithic Settlement Sites in Kyrenia District, North Cyprus: Systematic Surface Collection and the Interpretation of Artefact Scatters.* Oxford: BAR International Series 834.
- Şevketoğlu, M. 2002
 'Akanthou-Arkosyko (Titlisu-Çiftlikdüzü); the Anatolian connections in the 9th millennium BC.' In Waldren, W. and J. Ensenyat (eds.) *World Islands in Prehistory. International insular investigations*, pp. 98-106. Oxford: BAR Intern. Series 1095.
- Shanks, M. 1995
 'Archaeology and the forms of history.' In Hodder, I. *et al.* (eds.) *Interpreting Archaeology. Finding Meaning in the Past*, pp. 169-174. Cambridge: Cambridge University Press.
- Shanks, M. and I. Hodder 1995
 'Interpretative archaeologies: some themes and questions.' In Hodder, I. *et al.* (eds.) *Interpreting Archaeology. Finding Meaning in the Past*, pp. 30-33. London: Routledge.
- Shanks, M. and C. Tilley 1987
Social Theory and Archaeology. Cambridge: Polity Press.
- Shennan, S. 2002
Genes, Memes and Human History. Darwinian Archaeology and Cultural Evolution. London: Thames and Hudson.
- Sherratt, A. 1981
 'Plough and pastoralism: aspects of the secondary products revolution.' In Hodder, I. (ed.) *Patterns of the Past: Studies in Memory of David Clarke*, pp. 261-305. Cambridge: Cambridge University Press.
- Sherratt, A. and S. Sherratt 1991.
 'From Luxuries to Commodities: The Nature of Mediterranean Bronze Age Trading Systems' In Gale, N. (ed.) *Bronze Age Trade in the Eastern Mediterranean*, pp. 351-86. *Studies In Mediterranean Archaeology* 90.
- Sherratt, A. and S. Sherratt 1998
 'Small worlds: interactions and identity in the Ancient Mediterranean.' In Cline, E.H. and D. Harris-Cline (eds.) *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium, Cincinnati 18-20 April 1997*, pp. 329-43.
- Shields, R. 1991
Places on the Margin, Alternative Geographies of Modernity. London: Routledge.
- Shils, E. 1981
Tradition. Chicago: University of Chicago Press.
- Shotter, J. 1990
 'The social construction of remembering and forgetting.' In Middleton, D. and D. Edwards (eds.) *Collective Remembering*, pp. 120-38. London: Sage.
- Shotter, J. 1991
 'The rhetorical-responsive nature of mind: a social constructionist account.' In Still, A. and A. Costall (eds.) *Against Cognitivism. Alternative Foundations for Cognitive Psychology*, pp.55-79. New York: Harvester Wheatsheaf.
- Simmons, A.H. 2001
 'The first humans and last pygmy hippopotami of Cyprus.' In Swiny, S. (ed.) *The Earliest Prehistory of Cyprus: From Colonisation to Exploitation*, pp. 1-18. Boston: CAARI Monographs, vol. 2.
- Simmons, A.H. *et al.* 1999
Faunal Extinction in an Island Society: Pygmy Hippopotami Hunters of Cyprus. New York: Kluwer Academic, Plenum Publishers.

- Sitte, C. 1965
City Planning According to Artistic Principles. London: Phaidon Press.
- Skeates, R. 2005
 'Museum Archaeology and the Mediterranean cultural heritage.' In Blake, E. and A.B. Knapp (eds.) *The Archaeology of Mediterranean Prehistory*, pp. 303-320. Oxford: Blackwell.
- Smith, M.E. 1982
 'The process of sociocultural continuity.' *Current Anthropology* 23: 127-142.
- Smith, M.E. 1992
 'Braudel's temporal rhythms and chronology theory in archaeology.' In Knapp, A.B. (ed.) *Archaeology, Annales, and Ethnohistory*, pp. 23-34. Cambridge: Cambridge University Press.
- Sneddon, A. 2002
The Cemeteries at Marki: Using a Looted Landscape to Investigate Prehistoric Bronze Age Cyprus. Oxford BAR, Int. Ser. 1028.
- Soja, E.W. 1989
Postmodern Geographies. London: Verso.
- Sopher, D.E. 1979
 'The landscape of home. Myth, experience, social meaning.' In Meining, D. (ed.) *The Interpretation of Ordinary Landscapes: Geographical Essays*, pp. 129-149. Oxford: Oxford University Press.
- Sorabji, R. 1972
Aristotle on Memory. Providence: Brown University Press.
- Spence, J.D. 1985
The Memory Palace of Matteo Ricci. London: Faber
- Sperber, D. 1996
Explaining Culture: A Naturalistic Approach. Oxford: Blackwell.
- Sperber, D. 2001
 'Mental modularity and cultural diversity.' In Whitehouse, H. (ed.) *The Debated Mind. Evolutionary Psychology versus Ethnography*, pp. 23-56. Oxford and New York: Berg.
- Stagger, L. E., A. Walker, and G.E. Wright (eds.) 1974
American Expedition to Idalion, Cyprus. First Preliminary Report: Seasons 1971 and 1972. Cambridge, MA: BASOR Supplement 18.
- Stanley-Price, N. 1977a
 'Khirokitia and the initial settlement of Cyprus.' *Levant* 9: 66-89.
- Stanley-Price, N. 1977b
 'Colonisation and continuity in the early prehistory of Cyprus.' *World Archaeology* 9: 27-41.
- Stanley-Price, N. 1979a
Early Prehistoric Settlement in Cyprus 6500-3000 BC. Oxford: BAR International Series 65.
- Stanley-Price, N. 1979b
 'On terminology and models in Cypriote prehistory.' In Karageorghis, V. (ed.) *Studies Presented in Memory of Porphyrios Dikaios*, 1-11. Nicosia: Lions Club.
- Stanley-Price, N. 1979c
 'The structure of settlement at Sotira in Cyprus.' *Levant* 11: 46-83.
- Steadman, S.R. 2000

- 'Spatial patterning and social complexity on prehistoric Anatolian *tell* sites: models for mounds.' *Journal of Anthropological Archaeology* 19: 164-99.
- Steel, L. 2004
Cyprus Before History. From the Earliest Settlers to the End of the Bronze Age. London: Duckworth.
- Stevanović, M. 1997
'The age of clay. The social dynamics of house destruction.' *Journal of Anthropological Archaeology* 16: 334-395.
- Stevens, Q. 2006
'The shape of urban experience: a re evaluation of Lynch's five elements.' *Environment and Planning B: Planning and Design* 33: 803-23.
- Stevenson, M.G. 1982
'Toward an understanding of site abandonment behaviour: evidence from Historic mining camps in the southwest Yuko.' *Journal of Anthropological Archaeology* 1: 237-65.
- Stewart, E. and J.R. Stewart 1959
Vounous 1937-1938. Lund: Swedish Institute in Rome.
- Stordeur, D., M. Brenet, G. Dr Aprahamian and J.-C. Roux 2000
'Les bâtiments communautaires de Jerf el Ahmar et Mureybet horizon PPNA (Syrie).' *Paléorient* 26: 29-44.
- Strathern, M. 1988
The Gender of the Gift: Problems with Women and Problems with Society in Melanesia. Berkeley: University of California Press.
- Swanson, G. 2000
'Memory, subjectivity and intimacy: the historical formation of the modern self and the writing of female autobiography.' In Radstone, S. (ed.) *Memory and Methodology*, pp. 111-153. Oxford and New York: Berg.
- Swiny, S. 1981
'Bronze Age settlement patterns in southwest Cyprus.' *Levant* 13: 51-87.
- Swiny, S. 1989
'From roundhouse to duplex: a reassessment of prehistoric Cypriot Bronze Age society.' In Peltenburg, E.J. (ed.) *Early Society in Cyprus*, pp. 14-31. Edinburgh: Edinburgh University Press.
- Swiny, S. (ed.) 2001
The Earliest Prehistory of Cyprus: From Colonisation to Exploitation. Boston.
- Swiny, S., G. Rapp and H. Herscher (eds.) 2001
Sotira-Kaminoudhia: an Early Bronze Age Site in Cyprus. Boston: ASOR, CAARI Monographs, vol. 2
- Taylor, A.C. 1993
'Remembering to forget: identity, mourning and memory among the Jivaro.' *Man* 28: 653-78.
- Terdiman, R. 1993
Present Past: Modernity and the Memory Crisis. Ithaca, NY: Cornell University Press.
- Terrell, J. 1990
'Storytelling and prehistory.' *Archaeological Method and Theory* 2: 1-29.
- Thomas, G. 1988
'The Maa Chalcolithic excavations.' In Karageorghis, V. and M. Demas *Excavations at Maa-Palaeokastro 1979-86*, pp. 267-89. Nicosia: Department of Antiquities of Cyprus.
- Thomas, G. 1995

- Prehistoric Cypriot Mud Buildings and their Impact on the Formation of Archaeological Sites.* PhD Thesis, University of Edinburgh.
- Thomas, G. 2005
 'House form and cultural identity in Chalcolithic Cyprus.' In Clarke, J. (ed.) *Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean*, pp. 118-24. Oxford: Levant Supplementary Series, Vol. 2.
- Thomas, J. 1993
 'The politics of vision and archaeologies of landscape.' In Bender, B. (ed.) *Landscape: Politics and Perspectives*, pp.19-48. Oxford: Berg.
- Thomas, J. 1996
Time, Culture and Identity. An Interpretive Archaeology. London: Routledge.
- Thomas, J. 1998
 'Some problems with the notion of external symbolic storage, and the case of Neolithic material culture in Britain.' In Renfrew, C. and C. Scare (eds.) *Cognition and Material Culture. The Archaeology of Symbolic Storage*, pp.149-156. Cambridge: McDonald Institute for Archaeological Research
- Thomas, N. 1989
Out of Time: History and Evolution in Anthropological Discourse. Cambridge: Cambridge University Press.
- Thomas, N. 1991
Entangled Objects: Exchange, Material Culture and Colonialism in the Pacific. Cambridge, Mass.: Harvard University Press.
- Tilley, C. 1990
 'On modernity and archaeological discourse.' In Bapty, I. and T. Yates (eds.) *Archaeology After Structuralism*, pp. 128-152. London: Routledge.
- Tilley, C. 1993
 'Introduction: interpretation and a poetics of the past.' In Tilley, C. (ed.) *Interpretative Archaeology*, pp. 1-27. Providence: Berg.
- Tilley, C. 1994
A Phenomenology of Landscape: Places, Paths and Monuments. Oxford: Berg.
- Tilley, C. 1999
Metaphor and Material Culture. Oxford: Blackwell.
- Tilley, C. 2004
The Materiality of Stone. Oxford: Blackwell.
- Todd, I.A. 1981a
 'A Cypriot Neolithic wall painting.' *Antiquity* 55: 47-51.
- Todd, I.A. 1982a
 'Vasilikos Valley Project: fourth preliminary report, 1979-80.' *Journal of Field Archaeology* 9: 35-77.
- Todd, I.A. 1982b
 'Radiocarbon dates for Kalavassos-Tenta and Kalavassos-Ayious.' *RDAC*, 1982: 8-11.
- Todd, I.A. 1985
 'The Vasilikos Valley and the chronology of the Neolithic/Chalcolithic periods in Cyprus.' *RDAC* 1985: 1-15.
- Todd, I.A. 1987
Vasilikos Valley Project 6: Excavations at Kalavassos-Tenta. Volume 1. Göteborg: P. Åströms Förlag, SIMA 71:6.
- Todd, I.A. 1998
Kalavassos-Tenta. Nicosia: Bank of Cyprus Cultural Foundation.

- Todd, I.A. 2001
 'Kalavastos-Tenta revisited.' In Swiny, S. (ed.) *The Earliest Prehistory of Cyprus: From Colonisation to Exploitation*, pp. 95-107. Boston: American Schools of Oriental Research. Cyprus American Archaeological Research Institute Monograph Series, Volume 2.
- Todd, I.A. 2004
Vasilikos Valley Project 9: Excavations at Kalavastos-Tenta. Volume I. Sävedalen: P. Åströms Förlag, SIMA LXXI: 9.
- Todd, I.A. 2005
Vasilikos Valley Project 7: Excavations at Kalavastos-Tenta. Volume II. Sävedalen: P. Åströms Förlag, SIMA LXXI: 7.
- Todd, I.A. and P. Croft 2004
Vasilikos Valley Project 8: Excavations at Kalavastos-Ayious. Sävedalen: P. Åströms Förlag, SIMA LXXXI: 8.
- Tomasello, M. 1999
The Cultural Origins of Human Cognition. Cambridge Mass.: Harvard University Press.
- Torren, C. 1993
 'Making history: the significance of childhood cognition for a comparative anthropology of mind.' *Man* 28: 461-78.
- Torren, C. 2001
 'The child in mind.' In Whitehouse, H. (ed.) *The Debated Mind: Evolutionary Psychology versus Ethnography*, pp. 155-179
- Trigger, B.G. 1989
A History of Archaeological Thought. Cambridge: Cambridge University Press.
- Tringham, R.E. 1991
 'Households with faces: the challenge of gender in prehistoric architectural remains.' In Gero, J.M. and M.W. Conkey (eds.) *Engendering Archaeology: Women in Prehistory*, pp. 93-131. Oxford: Blackwell.
- Tringham, R.E. 1994
 'Engendered places in prehistory.' *Gender, Place, and Culture* 1: 169-203.
- Tringham, R.E. 1995
 'Archaeological houses, households, housework, and the home.' In Benjamin, D. and D. Stea (eds.) *The Home: Interpretations, Meanings, and Environments*, pp. 79-107. Aldershot: Avebury Press.
- Tringham, R. 2000
 'The continuous house. A view from the deep past.' In Joyce, R.A. and Gillespie (eds.) *Beyond Kinship: Social and Material Reproduction in House Societies*, pp. 1114-34. Philadelphia: University Of Pennsylvania Press.
- Tuan, Y-F. 1973
 'Space and place: humanistic perspectives.' *Progress in Geography* 6: 211-252.
- Tuan, Y.-F. 1974
Topophilia: A Study of Environmental Perception, Attitudes, and Values. Englewood Cliffs, N.J.: Prentice-Hall.
- Tuan, Y-F. 1977
Space and Place: The Perspective of Experience. London: Arnold Press.
- Tulving, E. 1983
Elements of Episodic Memory. Oxford: Oxford University Press.
- Turner, A. 2003

- 'Analysing the visual dynamics of spatial morphology.' *Environment and Planning B: Planning and Design* 30: 657-76.
- Turtzky, P. 1998
Time. London: Routledge.
- Tversky, B. 2000
'Remembering spaces.' In Tulving, E. and F.I.M. Craik (eds.) *Handbook of Memory*, pp. 363-78. New York: Oxford University Press.
- Tversky, B. 2003
'Structures of mental spaces. How people think about space.' *Environment and Behavior* 35: 66-80.
- Vagnetti, L. 1980
'Figurines and minor objects from a Chalcolithic cemetery at Souskiou-Vathyrkakas (Cyprus).' *Studi Micenei ed Egeo-Anatolici* 21: 17-72.
- Van Dommelen, P. 1999
'Exploring everyday places and cosmologies.' In Ashmore, W. and A.B. Knapp (eds.) *Archaeologies of Landscape. Contemporary Perspectives*, pp. 277-285. Oxford: Blackwell.
- Van Dyke, R.M. and S.E. Alcock (eds.) 2003
Archaeologies of Memory. Oxford: Blackwell.
- Van Gennep, A. 1960
Rites of Passage. Chicago: Chicago University Press.
- Vansina, J. 1972
Oral Tradition. London: Routledge.
- Varela, F.J., E. Thompson, and E. Rosch 1991
The Embodied Mind. Cognitive Science and Human Experience. Cambridge Mass.: MIT Press.
- Verhoeven, M. 1999
An Archaeological Ethnography of a Neolithic Community. Space, Place and Social Relations in the Brunt Village at Tell Sabi Abyad, Syria. Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul.
- Verhoeven, M. 2000
'Death, fire and abandonment: ritual practice at Late Neolithic Tell Sabi Abyad, Syria.' *Archaeological Dialogues* 7: 46-83.
- Verhoeven, M. 2002
'Ritual and ideology in the pre-pottery Neolithic B of the Levant and southeast Anatolia.' *Cambridge Archaeological Journal* 12: 233-58.
- Verhoeven, M. 2004
'Beyond boundaries: nature, culture and a holistic approach to domestication in the Levant.' *Journal of World Prehistory*: 179-282).
- Vygotsky, L.S. 1978
Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press.
- Walker, M. and L. Lucero 2000
'The depositional history of ritual and power.' In Dobres, M.-A. and J. Robb (eds.) *Agency in Archaeology*, pp. 130-47. London.
- Walker, W.H. 1995
'Ceremonial Trash?' In Skibo, J.M., W.H. Walker and A.E. Nielson (eds.) *Explaining Archaeology*, pp. 67-79. Salt Lake City: University of Utah Press.
- Walker, W.H. 1999

- 'Ritual life histories and the afterlives of people and things.' *Journal of the Southwest* 41: 383-405.
- Wallace, R. 1989
'Cognitive mapping and the origins of language and mind.' *Current Anthropology* 30: 518-26.
- Warnock, M. 1987
Memory. London: Faber and Faber.
- Waterson, R. 1988
'The house and the world: the symbolism of Sa'dan Toraja house carvings. *RES: Anthropology and Aesthetics* 15: 34-60.
- Waterson, R. 1990
The Living House: An Anthropology of Architecture in Southeast Asia. Oxford: Oxford University Press.
- Waterson, R. 2000
'House, place, and memory in Tana Toraja (Indonesia).' In Joyce, R. and Gillespie, S.D (eds.) *Beyond Kinship. Social and Material Reproduction in House Societies*, pp. 177-212. Philadelphia: University of Pennsylvania Press.
- Watkins, T. 1969
Chroniques des Fouilles et découvertes archéologiques à Chypre en 1968. Fouilles de Philia-Drakos' (ed. V. Karageorghis) *Bulletin de Correspondance Hellénique* 63: 504-12.
- Watkins, T. 1970
'Philia-Drakos, site A. Pottery, stratigraphy, chronology.' *RDAC* 1970: 1-9.
- Watkins, T. 1971
'Philia Drakos. Chroniques des Fouilles et découvertes archéologiques à Chypre en 1970.' (ed. V. Karageorghis) *Bulletin de Correspondance Hellénique* 65: 335-432.
- Watkins, T. 1973
'Some problems of the Neolithic and Chalcolithic period in Cyprus.' *RDAC* 1973: 34-61.
- Watkins, T. 1989
'The origins of house and home?' *World Archaeology* 336-47.
- Watkins, T. 2001a
'Signs without words: the prehistory of writing.' Unpublished paper presented in BANE, London, December 2001.
- Watkins, T. 2001b
'The beginning of religion at the beginning of the Neolithic.' unpublished paper presented in BANE, Liverpool, January 2001.
- Watkins, T. 2002
'Memes, memplexes and the emergence of religion in the Neolithic.' In Gebel, H.G.K., B. Dahl Hermansen, and C. Hoffmann-Jensen (eds.) *Magic Practices and Ritual in the Near Eastern Neolithic*, pp. 41-47. Berlin: Studies in Early Near Eastern Production, Subsistence, and Environment, vol. 8, *ex Oriente*.
- Watkins, T. 2004a
'Building houses, framing concepts, constructing worlds.' *Paléorient* 30: 5-23.
- Watkins, T. 2004b
'Putting the colonisation of Cyprus into context.' In Peltenburg, E. and A. Wasse (eds.) *Neolithic Revolution. New Perspectives on Southwest Asia in Light of Recent Discoveries on Cyprus*, pp. 22-34. Oxford: Levant Supplementary Series Vol. 1.
- Watkins, T. 2005

- 'The Neolithic revolution and the emergence of humanity: a cognitive approach to the first comprehensive World-View.' In *The Transmission and Assimilation of Material Culture in the Near East*. (Conference organised by CBRL held in Jerusalem February 2000).
- Watson, P.J. 1979
Archaeological Ethnography in Western Iran. Tuscon: University of Arizona Press.
- Watson, R. 1994
'Memory, history and opposition under state socialism: an introduction.' In Watson, R. (ed.) *Memory, History and Opposition under State Socialism*. Santa Fe: Scholl of American Research Press.
- Webb, J.M. 1995
'Abandonment processes and curate/discard strategies at Marki-Alonia, Cyprus.' *The Artefact* 18: 64-70.
- Webb, J. M. 1998
'Lithic technology and discard at Marki, Cyprus: consumer behaviour and site formation in the prehistoric Bronze Age.' *Antiquity* 72: 796-805.
- Webb, J. 2002
'Engendering the built environment: household and community in Prehistoric Cyprus.' In Bolger, D. and N. Serwint (eds.) *Engendering Aphrodite: Women and Society in Ancient Cyprus*, pp. 87-101. Boston: ASOR.
- Webb, J. 2006
'Material culture and the value of context: a case study from Marki, Cyprus.' In Papaconstantinou (ed.) *Deconstructing Context. A Critical Approach to Archaeological Practice*, pp. 99-119. Oxford: Oxbow Books.
- Webb, J. and D. Frankel 1999
'Characterising the Philia facies: material culture, chronology, and the origin of the Bronze Age in Cyprus.' *American Journal of Archaeology* 103: 3-43.
- Weiner, A. 1992
Inalienable Possessions: The Paradox of Keeping-While-Giving. Berkeley: University of California Press.
- Weissberg, L. 1999
'Introduction.' In Ben-Amos, D. and L. Weissberg (eds.) *Cultural Memory and the Construction of Identity*, pp. 1-12. Detroit, MI: Wayne State University Press.
- White, H. 1973
Metahistory. Baltimore, MD: Johns Hopkins University Press.
- Whitehouse, H. 1994
'Memorable religions: transmission, codification, and change in divergent Melanesian contexts.' *Man (NS)* 27: 777-97.
- Whitehouse, H. 1995
Inside the Cult. Oxford: Clarendon Press.
- Whitehouse, H. 1996
'Rites of terror: emotion, metaphor and memory in Melanesian initiation cults.' *The Journal of the Royal Anthropological Institute* 2: 703-715.
- Whitehouse, H. 2000
Arguments and Icons: Divergent Modes of Religiosity. Oxford: Clarendon Press.
- Whitehouse, H. 2002
'Modes of Religiosity.' *Method and Theory in the Study of Religion* 14: 293-315.
- Whitley, J. 2002
'Too many ancestors?' *Antiquity* 76: 119-26.

- Williams, H. (ed.) 2003
Archaeologies of Remembrance – Death and Memory in Past Societies. New York: Kluwer/Plenum.
- Wilhusen, R.H. 1986
 'The relationship between abandonment mode and ritual use in Pueblo I Anasazi protokivas.' *Journal of Field Archaeology* 13: 245-54.
- Wilk, R.R. and W.L. Rathje 1982
 'Household archaeology.' *American Behavioral Scientist* 25: 617-39.
- Wilson, P. 1988
The Domestication of the Human Species. New Haven and London: Yale University Press.
- Wright, G.R.H. 1992
Ancient Building in Cyprus. Leiden: Brill.
- 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*, pp. 1-15. London: Routledge.
- Yanagisako, S.J. 1979
 'Family and household: the analysis of domestic groups.' *Annual Review of Anthropology* 8: 161-205.
- Yates, F. 1966
The Art of Memory. London: Penguin.
- Yoffee, N. and A. Sherratt (eds.) 1993
Archaeological Theory: Who Sets the Agenda? Cambridge: Cambridge University Press.
- Zerubavel, E. 1995
Recovered Roots: Collective Memory and the Making of Israeli National Tradition. Chicago: University of Chicago Press.
- Zubrow, E.B.W. and P.T. Daly 1998
 'Symbolic behaviour: the origin of a spatial perspective.' In Renfrew, C. and C. Scarre (eds.) *Cognition and Material Culture: the Archaeology of Symbolic Storage*, pp. 157-174. Cambridge: McDonald Institute for Archaeological Research.

