

In Time and Space.
Spatiotemporal Relations, Community and
Identity in Cornwall, 400 BC – AD 200.

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Volume 1



A thesis submitted for the degree of
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Abstract

This thesis investigates evidence for social organisation and identities within the communities of Later Iron Age and early Roman Cornwall. The spatiotemporal analyses employed for these investigations derive from the recognition that perceptions of time and the use of space are inherently linked and examine both factors as active constituents of one another. These analyses are used to propose a relationship between on-site location of structured deposits and the age of material within these deposits; this is argued to relate directly to the construction and reproduction of social identities at varying scales. ‘Aged’ deposits associated with enclosure banks and ancient landscape features are seen as linked to the reproduction of wider community identities, based upon notions of distant kinships, and associated with temporary collectives of people as part of local transhumant practices. In contrast, more recent material culture associated with structural walls that define the ‘household’ – the regular unit of social reproduction – are seen as reflecting the reiteration of household identities and kin-based genealogies.

These insights are used to reinterpret the nature of social organisation in Cornwall in the Later Iron Age and early Roman periods. Based on the differential function of various site ‘types’ in terms of the intensity of use and the scale of social group, a heterarchical social structure dominated by extended households is proposed. The study also explores some more general concerns regarding the scales of identity and group organisation generated by the interpretation of later prehistoric remains, with particular reference to the notion of ‘western Atlantic identities’ during the European Iron Age.

Contents

Volume 1

List of figures.....	viii-xiii
----------------------	-----------

1.	Introduction.....	1-17
1.0	Summary.....	1
1.1	Analyses of 'time' and 'space'.....	3
1.2	Scale.....	6
1.3	The definition of identities in the Iron Age - Roman transition in Cornwall.....	9
1.4	Cornwall: a case study for spatiotemporal relations, scale and identity....	13
1.5	Case study outline.....	17
2.	Iron Age settlement in Cornwall: current narratives.....	18-63
2.0	Introduction.....	18
2.1	Traditional narratives for the Iron Ages of Cornwall.....	20
2.2	The Later Iron Age in Cornwall: recent revisions.....	23
2.3	The Later Iron Age – Roman transition.....	25
2.4	The settlement record of the first millennium BC.....	26
2.4.1	Open settlement.....	26
2.4.2	'Pounds'.....	29
2.4.3	Hillforts: chronology.....	31
2.4.4	The role and 'function' of hillforts in Cornwall and Devon.....	34
2.4.5	The 'unfinished' hillforts.....	36
2.4.6	Rounds.....	37
2.4.7	The character of the 'round'.....	39
2.4.8	Additions to the narrative of the 'round'.....	41

2.4.9	Comparisons for the 'round'	44
2.4.10	Promontory forts.....	47
2.4.11	Courtyard houses.....	49
2.4.12	Roofing a courtyard house.....	51
2.4.13	Courtyard house development.....	53
2.5	Fogous.....	54
2.5.1	Fogou 'function'	55
2.6	Field systems and palimpsest landscapes.....	57
2.7	The Late Bronze Age/Early Iron Age transition and social practises.....	58
2.8	Enclosing the landscape.....	60
2.9	Cornwall in context.....	61
3.	Spatiotemporal Relations and Scale.....	64-96
3.0	Summary.....	64
3.1	A case for 'space'	65
3.1.1	Structuration theory.....	66
3.1.2	Space and the duality of structure.....	67
3.2	Space-time.....	68
3.3	A note on agency.....	70
3.4	Combining space-time and agent: spatial analyses of past communities..	73
3.4.1	Space syntax.....	74
3.4.2	Access analysis and configurational theory.....	75
3.4.3	Spatial analyses in the 1990s.....	78
3.5	Phenomenological approaches to spatiotemporal relations.....	80
3.6	Prehistoric histories.....	82
3.7	'The past in prehistory': a current concern.....	84
3.8	Cultural biographies.....	86
3.9	Methodological analyses.....	87
3.10	Dataset.....	88
3.11	Structural areas (internal area and total area).....	89
3.12	Percentages of built space.....	92

3.13	View-sheds, access and orientation.....	93
3.14	Segmentation.....	94
3.15	Sequences in construction.....	94
3.16	Sequences in deposition.....	95
4.	Spatial Analyses: Non Courtyard House Settlement.....	97-133
4.1	The nature and extent of settlement over time.....	98
4.1.1	Structural dimensions and structural area.....	98
4.1.2	Earlier Iron Age.....	99
4.1.3	Later Iron Age.....	100
4.1.4	Later Iron Age/Romano British period.....	100
4.1.5	The Romano British period.....	101
4.1.6	Discussion: structural dimensions and structural area.....	101
4.2	Structural area and settlement type.....	102
4.2.1	Material assemblages.....	103
4.3	Structural area: courtyard houses and non courtyard house settlement..	105
4.4	Structural design.....	106
4.4.1	Buildings of the British Iron Age and Romano British period.....	106
4.4.2	Building traditions in the Iron Age and early Roman period in Cornwall.....	108
4.4.3	Roofing.....	109
4.4.4	Structural materials.....	110
4.4.5	Structural design and chronology.....	112
4.4.6	Structural design: Earlier Iron Age –Later Iron Age.....	112
4.4.7	Trevelgue Head.....	114
4.4.8	Structural design: Later Iron Age – Romano British.....	115
4.4.9	Structural design and settlement type.....	116
4.5	Shape in plan.....	117
4.5.1	Discussion: structure shape and chronology.....	118
4.5.2	Structural shape and area.....	119
4.6	Structure orientation.....	120

4.6.1	Orientation and cosmologies.....	121
4.7	Intra-site orientation and the spatial layout of enclosures.....	122
4.7.1	Open sites.....	122
4.7.2	Enclosed sites.....	123
4.7.3	Central 'space'.....	123
4.7.4	Settlement peripheries.....	125
4.8	Built space.....	128
4.8.1	Interpreting the percentage of built space.....	129
4.8.2	Discussion: the 'built space' percentage.....	133
5.	Spatial Analyses: Courtyard Houses.....	134-185
5.0	Courtyard houses.....	134
5.1	Segmentation formats.....	135
5.1.1	The dataset.....	136
5.1.2	Combinations and sequences.....	137
5.1.3	Room 'function'.....	139
5.1.4	Spatial summary.....	142
5.2	Excavated courtyard house structures and multiple courtyard house sites.....	143
5.2.1	Material assemblages and courtyard house status.....	144
5.2.2	Material culture and room function.....	145
5.2.3	'Main rooms' and 'subsidiary rooms'.....	146
5.3	Multiple courtyard house structures: site-based spatial analyses	148
5.3.1	Distinctions in room shape.....	149
5.3.2	Room division.....	152
5.3.3	Segmentation.....	152
5.4	Courtyard house chronology, accretion and courtyardisation.....	154
5.4.1	Chronology.....	154
5.4.2	Courtyardisation and accretion.....	156
5.4.3	Origins.....	158
5.5	Anomalous segmentation formats.....	162

5.6	Spatial orientation.....	163
5.6.1	Entrance way orientation.....	164
5.6.2	Room orientation.....	166
5.6.3	Spatial relations: controlling visual access and movement.....	168
5.7	Parallels to the courtyard house	169
5.8	Social relations of the Italian atrium house	171
5.8.1	Courtyard houses and atrium houses: a meaningful comparison?.....	173
5.9	Internal and total area.....	176
5.9.1	Courtyard house area and segmentation format.....	177
5.9.2	Structural area: interpretation.....	179
5.10	Summary and discussion.....	181
6.	Spatial Change in Time.....	186-215
6.1	The significance of the past.....	187
6.2	Genealogical histories	189
6.3	Mythical histories.....	190
6.4	Oral tradition and memory.....	192
6.5	Significance of the past in Cornwall: the Bronze Age.....	194
6.6	The spatial location of temporal references.....	195
6.6.1	Enclosure ramparts and the control of social memory.....	196
6.7	Negotiating relationships in time and space.....	198
6.7.1	The construction and reiteration of identities.....	199
6.8	Differing pasts: differing identities.....	202
6.9	Associations between ramparts and structures.....	205
6.10	Structures and genealogical histories in action.....	206
6.11	The re-use and deposition of artefacts within a structure.....	208
6.12	Deposits of material beneath structural walls.....	210
6.13	Genealogical histories and household identity.....	212
6.14	Summary: differing pasts and scales of identity.....	213

7.	Discussion: Transitions in Spatial Relations and Identities.....	216-244
7.0	The nature of the archaeological record.....	216
7.1	Structural change and identity in time and space.....	218
7.2	Interpreting courtyard house settlement.....	218
7.2.1	Courtyard house construction and agency.....	219
7.2.2	Similarity through difference.....	221
7.3	Interpreting 'round' settlement.....	223
7.4	Hillforts, cliff castles, open settlement and ambiguous enclosures.....	224
7.5	Deposition and identity.....	226
7.6	Hierarchies and heterarchies	228
7.6.1	Discussions of heterarchy.....	229
7.6.2	Heterarchy in the Iron Age.....	230
7.7	Western Atlantic identities	232
7.8	Cornwall in the early Roman period.....	235
7.9	Alternative narratives of the early Roman period	238
7.10	Conclusions: An Iron Age-Roman transition or a Roman Iron Age?.....	242

Volume 2

Figures.....	245-355
Appendix 1.....	356-360
Appendix 2.....	361-373
Appendix 3.....	374-401
Appendix 4.....	402-433
Appendix 5.....	434-442
Appendix 6.....	443-449
Appendix 7.....	450-451
Appendix 8.....	452-455
Bibliography.....	456-482

List of Figures

Frontispiece: copyright Kurt Jackson (Sketchbooks 2003-2004).

Chapter One.....245

Fig. 1.0 Regions of the Atlantic seaboard with defended homesteads.

Fig. 1.1 The distribution of Roman villas Romano-Celtic temples and principle Roman roads, towns and forts.

Fig. 1.2 Europe viewed from the Atlantic archipelago – highlighting the western Atlantic Seaboard.

Fig. 1.3 Suggested tribal divisions in Iron Age Britain.

Fig. 1.4 Map of Cornwall.

Fig. 1.5 Map of Key sites discussed in the text.

Fig. 1.6 Distribution of probable Iron Age/Romano British enclosed sites in Cornwall.

Fig. 1. 7 Distribution of probable Iron Age enclosed sites in Cornwall.

Chapter Two.....253

Fig. 2.0 Nanstallon Roman Fort.

Fig. 2.1 The Roman Villa at Magor Farm.

Fig. 2.2 Hut circles at Bodrifty.

Fig. 2.3 Catshole Tor.

Fig. 2.4 Garrow Tor.

Fig 2.5 Gold Park.

Fig. 2.6 Examples of ‘developed’ hillforts in Cornwall.

Fig. 2.7 Gradiometer survey of Gear hillfort.

Fig. 2.8 Hembury Hillfort.

Fig. 2.9 View from the interior of Trencrom tor enclosure.

- Fig. 2.10** Interior of Castle Dore.
- Fig. 2.11** Chun Castle.
- Fig. 2.12** The extant outer wall at Chun Castle.
- Fig. 2.13** Dun Aonghasa.
- Fig. 2.14** Interior plan of Killibury.
- Fig. 2.15** Castle-an-Dinas (St Columb).
- Fig. 2.16** Activity between the ramparts at The Rumps.
- Fig. 2.17** Examples of 'rounds' in Cornwall.
- Fig. 2.18** Plan of Structures and excavated areas at Trethurgy round.
- Fig. 2.19** Oval structures of Roman date in Cornwall.
- Fig. 2.20** Plan of Carvossa, Probus.
- Fig. 2.21** St Mawgan-in-Pyder.
- Fig. 2.22** Walesland Rath, Pembrokeshire.
- Fig. 2.23** Rathgall ringfort, C. Wicklow.
- Fig. 2.24** Small univallate enclosures from Brittany.
- Fig. 2.25** Plan of Gurnards Head.
- Fig. 2.26** View seaward at Gurnards Head.
- Fig. 2.27** Cliff castles in Cornwall.
- Fig. 2.28** Distribution of courtyard houses in Cornwall.
- Fig. 2.29** 'Classic' courtyard house design: CH1(i) at Chysauster.
- Fig. 2.30** Chysauster courtyard house settlement.
- Fig. 2.31** English Heritage reconstruction of a courtyard house.
- Fig. 2.32** Reconstruction of a courtyard house under a single roof.
- Fig. 2.33** Reconstruction of the figure-of-eight house at Great Berna.
- Fig. 2.34** Conjectural reconstruction of House Z2 at Trethurgy Round.
- Fig. 2.35** Porthmeor.
- Fig. 2.36** Examples of Cornish fogous.
- Fig. 2.37** Potential 'above-ground fogou' at Bosporthennis.
- Fig. 2.38** View along the long passage of the fogou at Carn Euny.
- Fig. 2.40** Map of Gündlingen type swords.
- Fig. 2.41** Trade routes in the early La Tène period.

Chapter Three.....289

Fig. 3.0 Structures, Systems and Structuration.

Fig. 3.1 Geo-visual representation of Hägerstrand's model of space-time and human action.

Fig. 3.2 Access Analysis: plan of house and justified access map.

Fig. 3.3 'Buildings as objects'.

Fig. 3.4 Proposed theoretical and methodological framework for investigating spatial relations.

Fig. 3.5 Excavated data: breakdown of dataset by site 'type' and chronological period.

Fig. 3.6 Examples of scale plans of structures transposed onto graph paper.

Fig. 3.7 Regression analysis for structural areas.

Fig. 3.8 Percentage of error involved between values calculated for total area.

Fig. 3.9 Bodrifty.

Chapter Four.....297

Table 4.0 Comparison of radius and external area for structures at Bodrifty.

Fig. 4.1 Comparison of external structural diameters at Bodrifty and Gurnards Head.

Fig. 4.2 Comparison of external areas of EIA/LIA structures.

Fig. 4.3 Comparison of internal and external diameters of structures of LIA date.

Fig. 4.4 Internal and total diameters of LIA/RB structures.

Fig. 4.5 External areas of structures at St Mawgan-in-Pyder.

Fig. 4.6 Comparison of internal and external diameters of RB structures.

Table 4.7 Average structural diameters in Cornwall, EIA-RB periods.

Fig. 4.8 A comparison of internal structural area, across chronological periods.

Fig. 4.9 A comparison of total structural area, across chronological periods.

Fig. 4.10 A comparison of internal structural area and settlement 'type'.

Fig. 4.11 A comparison of external structural area and settlement type.

Fig. 4.12 Comparison of structural areas: courtyard house structures and non-courtyard house structures of LIA-RB and RB date.

Fig. 4.13 Reconstruction of structures at Trethurgy.

Table 4.14 Range of wall width of stone-built structures at key LIA and RB sites.

Fig. 4.15 Construction designs EIA/LIA-RB periods.

Fig. 4.16 Breakdown of structural material and form for non-courtyard houses.

Fig. 4.17 Structural form and chronological period.

Fig. 4.18 Structural form and site type.

Fig. 4.19 Shape in plan and chronological period.

Fig. 4.20 Oval structures at Threemilestone round.

Fig. 4.21 Structure shape and internal area.

Fig. 4.22 Structural shape and total area.

Fig. 4.23 Entranceway orientation EIA-RB periods.

Fig. 4.24 Entranceway orientation categorised by period.

Fig. 4.25 Grambla and Trethurgy, displaying settlement around the periphery of the interior.

Fig. 4.26 Comparison of the internal layout of a typical round and a typical courtyard house.

Fig. 4.27 Central areas of focus at Porthmeor.

Fig 4.28 Distribution of structures within the interior: rounds.

Fig 4.29 Distribution of structures within the interior: enclosures.

Fig. 4.30 Hut V, St Mawgan-in-Pyder.

Fig. 4.31 Calculations of built space.

Chapter Five.....320

Fig. 5.0 Courtyard house design: courtyard, round room and circular/oval side chambers.

Fig. 5.1 Segmentation formats of discernable courtyard houses in West Penwith.

Fig. 5.2 Most common variations in segmentation format from dominants 1111 and 1101.

Fig. 5.3 Frequency with which specific numbers of each room type appear within a single segmentation format.

Fig. 5.4 Graph displaying the negative correlation between long rooms and circular/oval chambers in instances where the number of long rooms ≥ 3 .

Table 5.5 A comparison of the internal areas of circular/oval chambers and long rooms.

Table. 5.6 Location and frequency of hearths at excavated courtyard house sites.

Fig. 5.7 Hearth in the Long Room of Courtyard house 1 at Porthmeor.

Fig. 5.8 Rectilinear structure at Goldherring used for melting tin-ore.

Fig. 5.9 Segmentation formats at multiple courtyard house sites.

Fig. 5.10 Accretion and courtyardisation processes.

Fig. 5.11 Long room 1 of Courtyard House 1 at Carn Euny.

Fig. 5.12 Chronologies at Carn Euny.

Fig. 5.13 Lynchet running through Bosulow Trehyllys.

Fig. 5.14 Subdivided spaces; the long room and oval room of CH1(i) at Chysauster.

Fig. 5.15 Courtyard house CH1(i), Chysauster.

Fig. 5.16 Courtyard house 2, Bosulow Trehyllys.

Fig. 5.17 Entranceway orientation of courtyard house structures in Cornwall.

Fig 5.18 Entranceway orientation: courtyard houses and non-courtyard house settlement.

Fig. 5.19 Orientation around the courtyard of rooms and entrance.

Fig. 5.20 Orientation of rooms and entranceways around courtyard houses with segmentation format 1111.

Fig. 5.21 Orientation of rooms and entranceways around courtyard houses with segmentation format 1101.

Fig. 5.22 CH1 Chysauster, showing indirect line of sight from the entranceway to the round room, opposite.

Fig. 5.23 CH6 Chysauster, showing direct lines of sight from the entranceway through to the round room.

Fig. 5.24 'Figure.-of-eight' house at Bosta, Great Bernera.

Fig. 5.25 Jarlshof, Shetland.

Fig. 5.26 Central axes of view and movement.

Fig. 5.27 House of Paquius Proculus, Pompeii.

Fig. 5.28 Internal and total areas of courtyard houses.

Fig. 5.29 Comparison of internal area and segmentation format (formats with more than one structural example).

Fig. 5.30 Comparison of external area and segmentation format (formats with more than one structural example)

Fig. 5.31 Comparison of internal area and segmentation format (formats with a single structural example)

Fig. 5.32 Enclosed areas of courtyard houses with segmentation format 1101

Fig. 5.33 Enclosed area (internal and external) for courtyard houses with segmentation format 1111.

Chapter Six.....345

Fig. 6.0 Structure at Callestick.

Fig. 6.1 The geophysical plot from Castle Gotha.

Fig. 6.2 BA lynchet, re-used within the rampart of Maen Castle cliff castle.

Fig. 6.3 The suggested relationships between the scale of social group, location of action, and type of past being associated with.

Fig. 6.4 Tabulated evidence to support model 6.3.

Fig. 6.5 Stages in the construction and re-building of hut V, St Mawgan-in-Pyder.

Fig. 6.6 Iron pruning hook, deposited beneath the entranceway of house.

Chapter Seven.....355

Fig. 7.0 Tin ingots from the shipwreck in Bigbury Bay, south Devon.

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“The only native I have come across who had anything to say...was a peasant farmer...he was a man of 79, but vigorous still and of a lively mind. When I spoke to him about the old hedge and its ancient appearance, he said he had known it all his life; that he was a native of a small hamlet close to the hedge, and at the age of 7, when he first took to birds'-nesting, he used to hunt along it very summer day and came to know it as well as he knew the fence around his garden, and the walls of the cottage he lived in. It had not, he assured me, changed in the least during his early boyhood, with the turf and furze and bracken and woody ivy covering it in the same way in the same old places. This made him think that it must be very, very old. It seemed to me that his life, although a long one, was but a short period to measure by in such a case, that if he could have consulted his father and grandfather and his remoter ancestors back to the time when the last Cornish king was cast out by William the Bastard they would have all been the same testimony and said that the hedge was very old when they knew it”

W.H. Hudson, 1908 'The Land's End'.

1. Introduction

1.0 Summary

This chapter introduces three key issues which provided the initial motivation for this thesis and which feature throughout:

1) The relationship between the perception of time and the use of three-dimensional space. How do differing perceptions of ‘the past’ affect the use of space and manner of spatiotemporal relationships within a community? And in what ways, if any, has ‘time’ been integrated by archaeologists, into analyses of spatiotemporal relationships in the archaeological record? Of particular interest is the relationship between the perception of time in prehistory, and the construction and transformation of monumental architecture.

2) The scale of social actions and events, inferred from the archaeological record. To what extent are the ‘scales’ of archaeological narratives currently advocated for Later Iron Age social organisation in Britain, reflective of the actions and events, evident in the archaeological record? Is there a danger of favouring scales of social organisation for the past that are familiar and easier to understand? This thesis questions the validity of traditional interpretations of ‘Celtic Society’ and hierarchical social structures for the British Iron Age.

Specifically, this thesis questions the current models of social structure advocated for the Iron Age and early Roman period in Cornwall, the case study for this thesis. Currently, the Later Iron Age in Cornwall is associated with hierarchical social structures (e.g. Herring 1994; Quinnell 1986, 2004: 214-217; Todd 1987: 167). More recently, the Iron Age peoples of Cornwall have also been

incorporated into a broader collective of ‘western Atlantic identities’ (see Alberro 2001; Cunliffe 2001; Henderson 2000a; forthcoming), whereby communities of the western Atlantic seaboard are suggested to have shared a certain degree of cultural traits, social values and material expression. One of the determinates used for the identification of the western Atlantic seaboard is the presence of a monumental dry-stone architecture, and it is on this basis that the regions of the western Atlantic seaboard are recognised here, these being western Scotland, Ireland, Wales, Cornwall, Brittany and Iberia (see Fig. 1.0). The Late Iron Age – Roman transition provides the case study via which the issue of scale and the archaeological record can be further explored. Spatiotemporal analyses which recognise the interrelationship between time and space provide the mechanisms via which these issues are investigated.

3) The definition of identities in the Later Iron Age- Roman transition in Cornwall. This third topic relates in part to the issues of scale and interpretation raised above. In the Roman period Cornwall has sometimes been viewed as geographically, economically and/or culturally ‘peripheral’ and remote from the British province, due essentially to a lack of obvious traits of military expansion and ‘Roman’ style living (e.g. Scullard 1986 and see Mattingly 2006: 403 and Fig. 1.1). This is curious in itself and requires further investigation.

The nature of ‘identity’ is thus of key significance to the examination of the archaeological data for this period. The term ‘identity’ is used here to focus in particular upon the differential scales of social interaction and activity evident in the archaeological record. Jones (1997: xiii) defines the ethnic group as ‘any group of people who set themselves apart and/or are set apart by others with whom they interact or coexist on the basis of their perceptions of cultural differentiation and/or common descent’. Relationships evident in relation to both three-dimensional space and time (including the perception of time in the past) are thus regarded as potentially important indicators of ‘identity’.

In addition, it is argued below that the perception of a ‘peripheral’ Cornwall in the Roman period has also influenced the interpretation of social structures and

identities in the region in the Later Iron Age. To what extent are notions of 'western Atlantic identities' actually represented within the archaeological record? Are we in danger of grouping regions of Iron Age and Roman Europe, in part on the basis that they appear archaeologically 'removed' from the traditional core of Iron Age and Romano-British 'culture' (i.e. central and south-eastern Britain)? And are modern cultural ('Celtic') identities of the western Atlantic influencing interpretations of identity in the Iron Age and early Roman period in these regions? In updating the archaeological record for the Iron Age and early Roman period of Cornwall, and by applying innovative spatiotemporal analyses to this evidence (discussed in further detail below), this thesis will attempt to reconsider and reinterpret the narrative for the nature of social structures and scales of identity in the region, from c. 400 BC – 200 AD.

1.1 Analyses of time and space

The significance of time as a structuring factor of social action and identity has, for a long time, been a huge topic of debate within sociology, anthropology and social geography (e.g. Bourdieu 1990; Durkhiem 1965; Hägerstrand 1967; Heidegger 1962; Husserl 1966 to name but a few). Discussion to date has been summarised and developed eloquently elsewhere (e.g. Gell 1992; Gosden 1994). With explicit reference to prehistoric archaeology, the role and significance of time, and of 'the past' in prehistory, has only more recently been introduced into discussion (Bradley 2002; Gosden 1994; Gosden & Lock 1998; Lucas 2005 being obvious examples). This is no surprise, considering the partial nature of the archaeological record and the interpretative steps required to use it. The theoretical debate surrounding the interrelationship of time and space, and the archaeological signatures that result from this interrelationship are discussed in greater detail in Chapter 3.

Key to the interpretation of the role and significance of time to prehistoric communities is the recognition that both time and space are inherent and active ingredients in the reproduction of society (see Gregory and Urry 1985; Gosden 1994; Lucas 2005 for good summaries of this argument). In every instance, time and space engage as active 'frames of reference' for all forms of social expression and being (Gosden 1994: 17). This is because a temporal and spatial appreciation is intrinsic to any concept or understanding of being. As such, the consequences of both the perception of time *and* of space in the past are unavoidable, as they constitute inherent frames of reference for past social action and self definition. These structuring factors are inextricably linked; both are determinants of the each other.

More recent investigations have begun to explore the way in which 'the past' may have been viewed by prehistoric societies, and how such views might be distinguished within the archaeological record (e.g. Bradley 2002; Gosden & Lock 1998). Several studies have looked at the significance of time in relation to ancient 'monuments' (burial mounds, decorated menhirs etc) although aside from some notable exceptions (e.g. Bradley 2002; Gerritsen 2003) the majority of these studies have focused upon the *reuse* of monuments (e.g. Barrett 1999; Hingley 1996; Hingley 1999). Whilst recognising the 'significance' of time through reuse, these studies did not delve deep enough to examine the reflexive effects of three-dimensional space and time in tandem; to reflect upon the ways in which differences in the nature of reuse and the ways in which differing perceptions of time in the past may have affected the transformation of the built environment and the spatial organisation or patterning of actions on-site.

Similarly, within a vast amount of academic discourse in archaeology concerning architecture and the reflexive relationship between space and the reproduction of social relations (e.g. Dietler 1998; Hanson 1998; Hillier 1996; Hingley 1990; Kent 1990; Lawrence & Low 1990; Parker-Pearson & Richards 1994; Scott 1990; Scott 1993), very few specific case studies integrate the role and

significance of time within their methodological analyses. Whilst the significance of the past (often described in terms of ‘ancestry’ or as ‘a sense of tradition’) is frequently added, often toward the end of any interpretation of three-dimensional spatial analyses, rarely are both the perception of time and space integrated together within a methodology designed to investigate the social relations of a particular community. As with studies of ‘time’, studies of three-dimensional space within prehistory also rarely examine time and space as inherent and reflexive factors in the construction of social relations.

This is surely a problem if both perceptions of time and of ‘the past’, and the utilisation of three-dimensional space, are inherent ‘frames of reference’ for social action. Time and space must be considered together, as structuring influences upon past societies, as both affect one another. By investigating ‘time’ and/or ‘space’ in isolation, interpretations of the motivations and intentions of past communities will only ever amount to a partial reading of the archaeological record. Actions and events do not occur in a temporal vacuum, but as elements within a trajectory of social awareness that involves past, present and future. This is illustrated by the frontispiece sketch by Kurt Jackson, wherein perceptions, thoughts and/or memories concerning both the future and the distant past converged at a specific location and in relation to a specific act. In this sketch, Jackson is associating his position at a natural cove in Cornwall with his own perceptions of the events and peoples the cove would have witnessed in the distant past, whilst at the same time thinking about his actions in the cove and his forthcoming talk at Newlyn in the near future. Jackson’s own activity (sketching and painting), the effects of his location, and both distant and more immediate notions of time were converging at once within the experience and interpretation of this moment, captured within the sketch produced.

The term ‘spatiotemporal relations’ is used within this thesis to relate to the examination and consequent discussion of three-dimensional space and time as inseparable constituents of social actions. By examining and comparing shifts in

the three-dimensional organisation of space both within structures and within enclosures of Later Iron Age and early Roman date, and considering these in tandem with archaeological evidence for the differential perception of time and of 'the past' (e.g. Gosden and Lock 1998) a more informed and enhanced interpretation of the spatiotemporal relations and identities of these communities will be attained.

Specifically, this thesis argues that differential perceptions of the recent and distant past were used by the Later Iron Age and early Roman communities of Cornwall, to reiterate and redefine group identities at different scales (Fig. 6.3). Aged material culture, invested with meanings that evoked contrasting 'pasts' (genealogical, mythical etc) were combined within structured deposits and placed strategically on-site. Material associated with the recent past and direct lineages, it is argued, were incorporated with repetitious actions associated with individual structures and structure boundaries: spatial locations that defined the immediate household. In contrast, long-lived material associated with a more 'distant' past was incorporated within structured deposits and associated with the ramparts of sites that appear to have been used, temporarily or intermittently, by broader social collectives or social groups of wider composition than those of the daily household. By associating 'exotic' material from a more distant past with the physical boundaries defining the sites used by these 'collectives', time and space, it is argued, are converging to reiterate and reinforce broader scale identities. In formulating the oppositions outlined above, this thesis recognises the reflexive and intrinsic relationship between time and three-dimensional space in the construction and reiteration of identities at a variety of scales.

1.2 Scale

The scale at which interpretation is either representative of the archaeological record, or meaningful to archaeologists, is a hugely complex issue, but one that

has become a topic of increasing concern in recent years. This stems in part from concerns regarding the definition and identification of human agency within the interpretation of the archaeological record (e.g. Dobres & Robb 2000). More specifically for Iron Age studies, the last fifteen years has witnessed growing dissatisfaction with the back-projection of hierarchical social structures envisaged for the Late Pre-Roman Iron Age (e.g. Moore *et al.* forthcoming), as well as an increasing concern with the mechanics of this organisation (e.g. Hill 2003). Deconstruction of the 'Wessex' model of Iron Age society (e.g. Cunliffe 1991; 2003b) has led to hierarchical models of social organisation being replaced by notions of 'egalitarianism' (e.g. Hill 1995a; 1996), and more recently, 'heterarchy' (e.g. Crumley 1995; Hill 2003; Sharples forthcoming), although these discussions are still very much in their infancy.

In heterarchical social structures, power and/or social control is spread between several individuals and can change hands fairly frequently (Hayden 1995; Paynter 1989: 381-387). Instead of an overt hierarchy of authority, social differentiations are slighter and spread more widely, with 'leaders' drawing their existence from group support in a similar way to a political party. Far from being 'nice' or 'friendly', heterarchies can be complex, competitive, factional and fairly fluid; the fear of being outcast from the group preventing any single individual from attempting to gain or exert too much power. Importantly, heterarchies and hierarchies can be regarded as part of a shifting continuum of social organisation; hierarchies and heterarchies can both grow and collapse in different places and at different times, reflecting the social complexity of small-scale communities in prehistory.

One reason for an increasingly apparent apathy towards concepts such as 'egalitarianism' or 'heterarchy' it is argued below, are the scales at which narratives for the Later Iron Age have been sought. Whilst regional or 'tribal' differences are often highlighted, these regions often remain grouped by their similarities, forming more general narratives of 'Iron Age Britain' – particularly

when it comes to the nature of social organisation. To this extent, discussion of Iron Age Britain has traditionally been, and often continues to be organised by regional collectives: the highland and lowland zones discussed by Fox (1932) for example, or the ‘regional groupings’ (south and east, north and west) applied by Cunliffe (1991, 2005) ¹. The ‘western Atlantic seaboard’ is arguably a new example of this framework of classification (e.g. Cunliffe 2001; Henderson 2000a; 2000b).

Within broader narratives, differences in the archaeological records between regions tend to lack any critical evaluation of their contextual meaning. And whilst descriptive narratives that focus upon the similarities shared between regions may be archaeologically representative, were these scales of social grouping the most culturally significant at the time? Inevitably, the grouping of regions into broader areas, such as ‘south-east England’ or the ‘western Atlantic seaboard’ has also witnessed the homogenisation of socio-political structures for the communities of these areas, and this has arguably led to the almost uniform dominance of hierarchical models of ‘Celtic Society’.

It would appear that we still have problems in theorising the scale of social actions and identities, evident in the archaeological record. Before more complex variants of ‘social structure’ such as heterarchy can be judged fairly within Iron Age studies, further discussion is required of the nature and compositional dynamics of social groupings at a local scale. In the years since Hill (1989) challenged us to perceive an Iron Age that was ‘different’, we have begun to recognise and embrace notions of ritual occurring *within* the everyday (e.g. Giles & Parker-Pearson 1999; Hill 1995b; Parker-Pearson & Richards 1994c), but our comprehension of the ‘everyday’ structures and organisation of communities, and the language and notions we use to discuss them, remain familiar – couched within our own perceptions of social norms.

¹ This in turn may be due to the fact that interpretations of the mechanics of Later Iron Age societies in Britain are still largely constructed by extrapolating back from the social context of the early Roman period, as it is currently understood (a point discussed later within the thesis).

What, for example, do terms such as ‘household’, ‘extended household’ and ‘family’ look like for the Iron Age? And what are the intended implications of generic terms of social practice such as ‘settlement’, ‘domestic’ and ‘transhumance’? Although certain studies allude to regional differences in the nature and scale of social organisation, these terms continue to share definition, without any real discussion of their attributes or potential spatiotemporal variation or fluidity. Progress has been made toward the deconstruction of ‘settlement’ (e.g. Brück & Goodman 1999) and, hopefully, it will not be too long before this critical debate is expanded fully into Iron Age studies.

1.3 The definition of identities in the Iron Age – Roman transition in Cornwall

The issue of scale is perhaps best explored via a case study, which comprises the third theme within this thesis; the nature and definition of identities in the Iron Age – Roman transition in Cornwall. It is suggested below that interpretations of the Later Iron Age and early Roman periods of Cornwall derive in part from a perception that it is a region outside of, or ‘other’ to, the mainstream shifts and identities that are experienced in central Europe and central and south-eastern Britain. The notion of ‘western Atlantic identities’ in the Iron Age is becoming particularly popular within Iron Age studies (e.g. Cunliffe 2001; Henderson 2000b; forthcoming). There are certainly a number of similarities in the settlement and material records shared between the regions of the Atlantic arc or ‘seaboard’ (Fig. 1.2), the cumulative effect of which has developed into a persuasive argument for the grouping of a comparable ‘set’ of identities, forged by a seaboard outlook and a degree of shared cultural influences:

‘we are looking at societies immersed in a common state of existence, an existence that was dominated by the sea...throughout the prehistoric period and beyond, the sea facilitated contacts between these communities ensuring that the Atlantic area became a recognisable zone prone to stimulating itself, creating...broad similarities over long distances’

(Henderson 2000b: 149-150).

‘In their comparative isolation they accentuated these symbols...(dominant architecture, stelae, decorated pottery)...over time, their remoteness intensifying the outward and visible signs of their separateness.... it was their common geography, located as they were at the end of the world in like environments, and the effect which that had on social development, that led to the similarities we observe. There was not one identity but a number of identities...[but]...that said, the similarities were such that adjacent communities along the Atlantic façade would have found neighbours across the sea more akin in their values, and safer to deal with, than neighbours adjacent on land’

(Cunliffe 2001: 364).

Whilst these works have laid an important new framework for the interpretation of the western Atlantic, it is important not to over emphasise the degree of similarity between these westerly regions – or their apparent ‘difference’ from their land-based neighbours. Cunliffe, for example, is careful to note the presence of ‘identities’ along the seaboard, thus distancing himself from any normative expression of an Atlantic ‘culture’. However, a degree of shared cultural practice is inherent to his description of shared ‘identity’; apparent in the ‘neighbours...more akin in their values and safer to deal with....’ for example.

This point leads us into the mechanics of local cultural development within the regions of the western Atlantic seaboard during the Iron Age. Whilst similarities in the material signatures of the regions are recognised, the development of these traits needs further discussion and explanation, whilst the unique peculiarities of each region also require a more detailed examination of their development. As Henderson notes, ‘the challenge now lies in trying to define more subtle evidence of cultural contacts and similarities’ (Henderson forthcoming). This thesis will seek to answer his call, in relation to Cornwall².

Whilst it would appear that many of the Iron Age communities of the western Atlantic seaboard were closer to each other in their material expression than they were with communities from further inland, this does not mean that we can dismiss the presence or effects of contacts within other non-seaboard communities. To what extent can the unique developments of western Atlantic regions, such as Cornwall, be viewed as an (unequal) culmination of influence from both seaboard and inland communities, *inherently framed* through the materials and experience of coastal locations? In other words, are the circumstances and restrictions of seaboard living disguising contacts and influences both from inland Britain and elsewhere on the Continent?

In essence, this thesis will argue that whilst a certain degree of similarity can be observed in the archaeological records of the communities of the western Atlantic seaboard, significant differences can also be observed. In relation to Cornwall, differences in the use of space within Iron Age enclosures and structures apparent elsewhere on the seaboard, and differences in the nature and sourcing of materials, it is argued, resulted in very different and regionally unique social practices. In addition, these local traits highlight the local adaptation and indigenous trajectory of social development; a culmination of seaboard environment, natural resources and influences from both inland and the western Atlantic. In light of this discrepant regionality, the notion of a wider social

² The justification for using Cornwall as a case study is outlined at the end of this chapter.

grouping – of a ‘western Atlantic identity’ during the Iron Age – is arguably not a particularly meaningful way of recognising the inherent small scale diversity of the regions of the western Atlantic seaboard, as well as their shared similarities.

Finally, I wish to question the significance that the traditional narrative of the expansion of the Roman Empire has had upon the interpretation of Cornwall in the Iron Age and early Roman period. To what extent is there an implicit suggestion that the communities of the western Atlantic seaboard are grouped by their ‘otherness’, in relation to the nature of Roman conquest and their apparent lack of ‘Romanisation’? It is argued below that the grouping of the communities of the Atlantic seaboard is supported *in part* by a continued impression of these regions as culturally peripheral to the core developments of the Late Pre-Roman Iron Age (LPRIA) and early Roman periods. Cunliffe (1991: 130-179) for example, discusses ‘the tribes of the south-eastern core’ and the ‘the tribes of the periphery’, the core being the coin-using regions regarded as being most directly affected by the build up and subsequent invasion of the Roman army in 43 AD. Southern Wales, Devon and Cornwall are discussed as distinct from even the ‘periphery’, the recipients of the ‘bow-wave effects of the Roman presence’ (Cunliffe 1991: 180). This perception is reinforced by collective terms such as ‘Atlantic fringe’ or ‘Atlantic façade’ sometimes used to describe these regions (e.g. Cunliffe 2001: 308, 337). With some notable exceptions (e.g. Taylor 2001), this impression is most clearly apparent in the narratives that continue to be employed by many archaeologists and ancient historians for the ‘Romanisation’ of Britain; where, for example, Cornwall and Wales are only briefly discussed and often simply overlooked within broader narratives of the Roman province (e.g. Millett 1990).

However, if we consider the distribution within southern Britain of key traits, traditionally understood to be ‘Roman’, the distinctiveness of both Cornwall and Devon within these is clear (see Fig. 1.1). As these maps suggest, does Cornwall and much of Devon remain unchanged after the Roman invasion of Britain? Or

are the approaches we currently use to understand and interpret the process of 'Romanisation' in Britain, insufficient for the study of these areas? Are theoretical inadequacies in the way in which we currently incorporate these *geographically* peripheral regions into our general accounts of the 'Roman' period leading to an amplified impression of their existence as *culturally* peripheral regions? And has this in turn, led to an exaggeration of the similarities and 'identities' shared amongst the communities of the western Atlantic seaboard?

It is beginning to become clear that the Roman governance of the British province was a much more varied process than traditionally understood (e.g. Mattingly 2006). Because of the difference in the extent of Roman military sites in Devon, some authors have recently begun to question the extent to which Cornwall can be regarded as being administered alongside Devon as part of Roman 'Dumnonia', with the suggestion instead that Cornwall was largely self-administrating in the Roman period, albeit without any obvious centre of localised power or control (e.g. Mattingly 2006: 403-408; Quinnell 2004: 216-217). Similarly, the extent to which British Iron Age 'tribal' boundaries can be taken as 'real' self-identifying social groupings continues to be debated (e.g. Moore *et al.* 2005) – particularly for non-coin issues divisions such as the 'Dumnonii', the traditionally favoured collective 'tribal' name for the Iron Age inhabitants of Devon and Cornwall (Fig. 1.3 and see Mattingly 2006: 207 for an alternative viewpoint). So as not to pre-empt any scales of social practice, social grouping or identity, neither term (the Iron Age 'Dumnonii' or Roman 'Dumnonia') will be used in this thesis, although the identity of the inhabitants of Cornwall during the Later Iron Age and early Roman period will be a recurring theme of discussion.

1.4 Cornwall: a case study for spatiotemporal relations, scale and identity

Justification needs to be given for the choice of the modern county of Cornwall as the region of study for this thesis. The reasons can be summarised as follows, and are discussed in detail below:

- Cornwall is a clearly defined region with clear natural boundaries (seas and rivers, which can link as well as divide).
- Cornwall is clearly situated within the western Atlantic seaboard and has evidence of contacts with the other regions comprising the seaboard.
- Cornwall has a unique geology and environment which has resulted in an exceptional and unparalleled archaeological record.
- The current interpretation of this archaeological record draws heavily on traditional narratives of 'Celtic Society' that do not appear to explain the uniqueness of the archaeological record within the county.
- Cornwall provides a manageable area of study, with a good selection of published excavated data and accessible un-published resources based within the SMR records of the Historic Environment division of Cornwall County Council.

Cornwall is the south-western-most county of mainland Britain (Fig. 1.4) and is bordered by the Irish Sea to the north, Atlantic Ocean to the west and south. The sense of the sea is ever-present in Cornwall, with no inland point ever further than 25 km from the sea (Johnson and Rose 1994: 2-3). The coastline is particularly dramatic, and stretches for 525 km providing a high ratio of coastline to inland area, which is only 3549.2 km² (Selwood *et al* 1998: 1). The county is bordered on the east by the River Tamar, which extends south-north for almost the full breadth of the south-west peninsular.

The geographical isolation of Cornwall has long evoked a distinctive sense of identity amongst its inhabitants and this remains the case for many Cornish today (Laviolette 1999; Payton 1993b). The natural boundaries of the modern county

of Cornwall would have also made it a clearly defined region in prehistory. However it is important to remember that rivers and seas could unite as well as divide. Cornwall's Atlantic position enables comparison with other regions from the western Atlantic seaboard, as part of the examination of 'western Atlantic identity' outlined above. Where relevant, parallels from the settlement record from Devon will also be introduced into discussion.

Inland, the geology of Cornwall provides a very special and unequalled topography that is easily recognisable. Cornwall forms part of the Cornubian Massif, consisting of an unexposed Petrozoic basement overlain by Palaeozoic sediments (killas), contemporaneous volcanic rocks and minor igneous intrusions (Selwood et al 1998: 1-4). These granite intrusions now form upland moors, the largest being Bodmin moor. Erosion of this geological composition has left a landscape littered with characteristic granite 'tors', and gently rolling lowlands in the areas of the other rock types.

The combination of dominant seascapes and rugged landscapes provide a sense of permanence to the region; an impression that the land was artificially sculpted a long time ago and has been that way ever since. The visible remains of generations past, often created from the same granitic rocks that protrude naturally from the ground in places, and characterises the coastline, adds to this impression. These include derelict tin mines, kaolin ('china clay') mines and spoil heaps (the so-called 'white mountains'), medieval crofts and barns, decorated crosses, prehistoric hut circles and enclosures, standing stones and stone circles. It is the close interconnection of monumental structures and the landscape, many examples of which draw upon natural features of the coastline or moorlands, that give Cornwall this depth of character, age and for some, a 'spirituality' (Johnson & Rose 1994: 1; Laviolette 2003). This is a region of particular interest when considering the range of human relationships to 'time', from any period (e.g. Deacon 1993; 2000; Hale 2000; Laviolette 2003; Sharpe 1992; Tregidga Forthcoming).

The geology and natural topography of Cornwall also determine the key socio-economic interests of the region: fishing, tin mining and more recently, tourism. The drama of the coastline is interspersed with natural harbours, and the island of St Michael's Mount is thought to have provided a key location for trade in the later prehistoric period. This region is, and traditionally always has been, orientated around the sea; both in terms of sea-based trade and contact and natural resources (fish, shell fish, seaweed, salt etc). Mineral resources including tin and gold supported, until relatively recently, a thriving mining industry, the origins of which can be traced to the Bronze Age (Penhallurick 1997: 23). The combination of mineral wealth and coastal position placed a significance on Cornwall in the Later Iron Age, and even more so in the early Roman period (Mattingly 2006). When compared to centres of British iron extraction in the early Roman period however (e.g. Orejas 2003), Cornwall lacks the obvious landscape evidence of Roman industrial activity. This is one example of the apparent absence of Roman influence in Cornwall, which raises important questions relating to the nature of identity and social relations in the region during the Later Iron Age – Roman transition.

Despite a history of mineral and clay extraction (see Gerrard 2000; Herring 1992; Penhallurick 1997; Tylecote 1966), the degree of archaeological preservation in Cornwall remains high. Evidence of prehistoric activity and structures, particularly in the uplands, is fairly extensive, despite some land clearance. Archaeological features in lowland areas have suffered more from cultivation, although data from these areas are increasing due to PPG16 and the continuing hard work of the Cornwall Archaeological Unit and the Historic Environment Services of Cornwall and Scilly. Not only is the dataset for the later prehistoric period extensive, but much of it is also rare for the British Iron Age (parallels only being found in other Atlantic seaboard regions), and certain structural forms, on current evidence, are unique. Cornwall thus has a rich and varied archaeological record from the later prehistoric period and one that is unparalleled in the rest of Britain. It is this wealth and diversity that is the most significant factor in the choice of Cornwall as the case study for this thesis.

1.5 Case study outline

The following thesis draws data from the Later Iron Age and early Roman period in Cornwall (c. 400 BC – AD 200), a study area, as outlined above, with unmatched potential for archaeological examination in this period. By bringing up to date the excavation record, combining published site reports with unpublished data up to June 2005, I will clarify the temporal and spatial patterning of Iron Age settlement in the region and refine current systems of classification. The spatiotemporal relations of these structures and enclosures will then be considered against distinctions inherent within and between various settlement forms and associated material culture. Certain spatial traits will be compared, where appropriate, with neighbouring maritime regions (Iberia, Brittany, Ireland, Wales, western Scotland), thus placing the peninsula in its European context. This is necessary due to the unique combination of structural and material elements evident within the archaeological record of Iron Age and Roman Cornwall. Furthermore, the assessment of the Cornish data with reference to its contemporary Atlantic context will enable a re-evaluation of the relative importance of external and internal factors structuring the socio-economic organisation and identity of south-western communities in the Iron Age. Within this framework, a contextually more sensitive model of regional organisation will be generated which will challenge the traditional interpretation of Later Iron Age and early Roman social organisation currently advocated for the region. The methodology for this research is discussed in Chapter 3. Distribution maps of Iron Age and early Roman sites in Cornwall and the key sites discussed within this thesis are shown in Fig. 1.5, Fig. 1.6 and Fig. 1.7.

2. Iron Age settlement in Cornwall: current narratives

Within this chapter the range of settlement in Cornwall is summarised and considered in relation to examples from Devon, the Isles of Scilly and other localities along the western Atlantic seaboard. The current understanding of the Iron Age settlement record in Cornwall is brought up to date, incorporating published data and non published data from the Sites and Monuments Record (the so called ‘grey literature’). This material provides a framework against which current models of Iron Age settlement and social structure are outlined. The nature of settlement and social structures in the Earlier Iron Age receives specific discussion, providing a context for the detailed analysis and discussion of the nature of spatiotemporal relations and social organisation in Later Iron Age Cornwall, in Chapters 4 and 5.

2.0 Introduction

Much of the attention given to the Late Bronze Age and Iron Age settlement archaeology of the south-west peninsula has been in the context of broader landscape assessments. During the early 1990s 400 hours of aerial reconnaissance resulted in over 1000 previously unrecorded crop-mark sites being added to the county SMR in Devon, several of which from the small sample investigated were first millennium BC in date (Griffith 1994). In Cornwall, landscape surveys of Bodmin Moor (Johnson & Rose 1994) and the Lizard (Smith 1987) have increased the number of known earthwork sites in Cornwall, whilst recent work by the *Time Team* at the large ‘hillforts’ of Gear and Caer Vallack resulted in the most extensive geophysical survey ever completed on Cornish Iron Age sites, in just three days (Gaffney and Gater 2003: 129). The Cornwall and Isles of Scilly

mapping project (COMP) - currently complete for over 85 percent of Cornwall - has added greater detail to the settlement landscape, with particularly high densities of enclosure earthworks and hut circles identified around the Camel estuary. This project was due to be completed by the end of 2005 (Young 2001).

Because of similarities between the archaeological records of the two regions, it is useful to compare the present situation of Cornwall with that of Devon. Devon has not been as systematically surveyed as Cornwall and the Isles of Scilly, although two separate smaller mapping projects have examined extensive areas of the county. The Dartmoor mapping programme was a forerunner of the National Mapping Programme (NMP) and recorded all of the Dartmoor National Park and over 75 square kilometres of south-western Dartmoor that fell outside the Park's boundaries. Still in progress, is the Winkleigh Biomass mapping programme, examining four transects to the north and east of the Dartmoor National Park, covering c. 80 km in extent. The programme is targeting areas identified for fuel crops which will be used at the intended power generator at Winkleigh, and incorporates much of lowland rural Devon within its boundaries (<http://www.english-heritage.org.uk/sever/show/nav.1186>).

The investigation of lowland areas of the south-west peninsula remains an archaeological priority. The settlement record itself is biased toward the uplands areas where archaeological attention has traditionally focused; in part because of the greater visibility of settlement due to the presence and use of stone for structures during prehistory and in part because of the relatively low intensity of use of these areas in the post-prehistoric periods¹. In contrast, the lowland areas of Cornwall have long been subject to cultivation, and have suffered particularly from more recent intensive agriculture. Archaeological remains are harder to detect here, and are normally only found as part of developer-funded archaeology

¹ Having said this, a significant percentage of extant archaeological remains have still been lost from upland areas: Johnson and Rose (1994) for example, have identified more than 50 hut circles destroyed on Bodmin moor in the last 30 years, mainly due to agricultural improvements.

(e.g. Jones 1998-9b; Nowakowski 1991, 1994). As a result we are highly likely to be missing much of the lowland Iron Age settlement in the region.

More recent developer-funded and rescue excavations have helped broaden our current understanding of settlement and activity in the first millennium BC (e.g. Craze *et al* 2002; Johns 2000; Lawson Jones 2003; Nowakowski 1994, 2000; Ratcliffe 1992). In most cases however this work has yet to receive public dissemination and these sites have not yet been situated within broader narratives for the region. Despite this continuing hard work, Late Bronze Age and Iron Age sites remain elusive and relatively few have been the focus of large-scale excavation. Consequently, views of the Iron Age societies of Devon and Cornwall have remained relatively static.

2.1 Traditional narratives for the Iron Ages of Cornwall

‘Settlements of the mid first millennium...are few when compared with the preceding and following periods. What is known about them suggests no major change in settlement type had occurred’

(Todd 1987: 155).

Within current orthodoxy a reduction in the visibility of settlement during the Early Iron Age (*c.* 800/600 BC – 400 BC), most notably in the uplands, is linked to a period of suggested environmental deterioration which forced communities off of the upland moors and into the lowlands. When placed alongside largely standardised assemblages of local pottery and metalwork forms; generalising accounts of continuity in the nature of settlement and society between the Late Bronze Age and Early Iron Age of Cornwall and Devon result (e.g. Todd 1987, see above). As will be suggested below however, this may be more of an implied ‘continuity’ than a real one, with dating relying largely upon typological bridges

between settlement forms and weak pottery chronologies, rather than on excavated evidence, which is limited.

Early Iron Age society in Cornwall is currently perceived as dominated by a few key early hillforts and cliff castles, seen as centres of elite power and defence (Herring 1994). In the Later Iron Age (c. 400 BC) a social hierarchy is suggested to have continued albeit in a more dispersed and localised form, with the number of hillforts increasing in number, in contrast to trends witnessed in Wessex and elsewhere at this time (e.g. Cunliffe 1984). Elite power is thought to have resided in the ownership and control of land and animal stock, and to a lesser degree, trading contacts (e.g. Quinnell 2004: 214-215; Herring 1994: 54). This narrative aligns with similar arguments for Later Iron Age societies in southern Britain, which are drawn mainly from Roman and early medieval Irish sources (e.g. Cunliffe 1991; Cunliffe 2003b).

For many, hillforts are regarded as the residences of the elite; ‘an upper social stratum of chiefs’ (Quinnell 1986: 117, 1994), whilst cliff castles have been interpreted as ‘summer residences’ of equivalent status and function; as ‘objects of display’ (Cunliffe 1978: 278). These latter sites may, it is argued, have played a more particular role in the organisation of social ceremonies and long-distance trade, which were also under the control of ‘higher levels of society’ (Herring 1994: 54; Sharpe 1992).

Within traditional accounts, smaller univallate enclosures known as ‘rounds’, the most prolific settlement category in the Later Iron Age, are regarded as ‘settlements of landowning kindred groups’ (Quinnell 1986: 117). These groups may have borrowed or rented stock from the elite, and paid tribute in the form of agricultural surplus and/or labour (Quinnell 1994). Hill slope enclosures and courtyard houses are discussed in fairly ambiguous terms within this model, with the implication that they may have reflected additional distinct strata of Iron Age society.

Herring (1994) takes steps toward a slightly different balance of power between hillforts and rounds, suggesting hillforts may have been constructed by the conjoined power of household's resident within rounds, to function as local centres for the defensive and ritual needs of the community. However, in contrast to similar suggestions for the hillforts of Wessex (e.g. Hill 1996; Stopford 1987) this interpretation does not render hillforts as communal centres, abstracted from the main social/settlement hierarchy (*contra* Quinnell 2004: 214); nor does it envisage a more 'egalitarian' Iron Age. Herring states clearly that his model for social organisation in the Later Iron Age of Cornwall 'has room for, indeed may even require, a higher level of rural society capable of co-ordinating and verifying the new arrangements...manifest in....places like St Michael's Mount or even Treryn Dinas, strikingly impressive in comparison with the less distinctive hillforts' (Herring 1994: 50). Indeed, in his subsequent discussion, very little appears to have changed from the traditional narrative of the character of the hierarchical relationship between the 'elite' residents of hillforts and the residents of rounds:

'The higher levels of society, those probably responsible for building the defended sites (hillforts and cliff castles), will have both exploited and served the farmers (of the rounds and open settlements)...Services provided by the higher levels will probably have centred on running local administration systems, ensuring local justice worked and guaranteeing security...and overseeing or organising both local trade or exchange and longer distance trade. Defended central places...would have served all these functions'

(Herring 1994: 54).

Until recently, then, narratives for the Iron Age of Cornwall have remained fairly orthodox and, within current interpretations, the mechanics of social relations and

the overall structure of Later Iron Age society appears, at best, murky and in danger of being contradictory.

2.2 The Later Iron Age in Cornwall: recent revisions

With the deconstruction of the idea of hillforts as centres of elite redistribution (Hill 1996; Sharples forthcoming; Stopford 1987) and the theoretical interrogation of the applicability and reliability of early medieval sources as ‘windows’ to the Iron Age, the most recent narrative for the LPRIA and early Roman social structure of Cornwall (Quinnell 2004) has placed elite power within the complex and shifting dynamics of ‘round’ communities. In doing so, Quinnell has restated Herring’s interpretation of hillforts as centres for communal activity, but this time emphasises the round as the main centre of social power and social reproduction. During the relatively long period during which rounds existed as ‘stable social units’ in Cornwall, certain enclosures (and their associated social units) are suggested to have both gained and lost local dominance over others; the morphologically different and relatively short-lived sites of Carvossa and St Mawgan-in-Pyder being given as probable examples (Quinnell 2004: 216). These sites are also noteworthy for their relatively ‘rich’ material assemblages and their apparent ability to access long-distance trade networks.

A particularly turbulent and shifting hierarchical structure is thus now envisaged by Quinnell for the Later Iron Age and early Roman period in Cornwall, a situation facilitated by the fairly localised and independent nature of society, visible through the settlement record:

‘the small size of these largely self sufficient communities...(rounds)...may have contributed to flexibility in changing circumstances and so to their continuity’

(Quinnell 2004: 214).

The implication is that the magnitude of certain rounds, and variations in their morphology, were *active* constituents of the power held by their resident groups:

‘In the Later Iron Age groups with some status used the authority *provided by the rounds in which they lived* to maintain stability in their areas...hillforts, especially those with multiple enclosures, might be seen as communal centres for these groups’

(Quinnell 2004: 216 my emphasis).

A hierarchy is still present within this interpretation of Iron Age society, although the nature and extent of control is more ambiguous as rounds are deemed largely self-sufficient socio-economic units. Power is suggested to have derived from the differential nature of enclosure itself, which continued to be important into the early Roman period. Thus, shifts in the dominance of certain groups in the region throughout the Later Iron Age are suggested to be evident in the construction of distinctive earthworks which do not conform to either a standard univallate circular ‘round’ or a multi-vallate circular hillfort (i.e. the enclosures of Carvossa and St Mawgan-in-Pyder).

2.3 The Later Iron Age – Roman transition

A pre-existing Late Iron Age social hierarchy is also important in terms of Quinnell's recent reassessment of the Roman administration of Cornwall. This period of the county's history is a recurring topic of debate, largely due to the almost complete absence of 'Roman' traits in the region: no convincing Roman roads, a single, short-lived military fort (Nanstallon, Fox & Ravenhill 1972 see Fig 2.0) and a single Roman 'villa', of which only two walls are parallel (Magor Farm, O'Neil 1933 see Fig 2.1). It has traditionally been suggested that both Cornwall and Devon were administered from the *ordo* (council) at the *civitas* at Exeter, but Quinnell highlights the possibility that the lack of any obvious power base within Cornwall (which may have reduced any feelings of threat to Roman rule in the region) may have led to a degree of self-administration. Taxes and tributes would still have to have been collected and paid to the *ordo*, but the organisation and authority for this may have operated along traditions that reached back into the Late Iron Age social structure, rather than with standard provincial administrative practitioners (Quinnell 2004: 216).

This recent re-appraisal would appear to better reflect the Iron Age record for Cornwall and highlights the subtle regional differences that are beginning to be identified across early 'Roman' Britain (e.g. James & Millett 2001). However, certain questions still remain unanswered. How exactly was society organised in LPRIA Cornwall, if its constituent small social groups were indeed essentially self-sufficient? Upon what basis did the communities of certain rounds gain and exert power over others, and for what reasons did these power centres shift over the course of time? What evidence do we have for Cornwall as a self-administrating region in the early Roman period, apart from an obvious absence of Roman towns, forts, roads and villas? Indeed, why might Cornwall have been treated in this way and differently to virtually every other region in the province? These questions will be returned to in the discussion of the spatiotemporal relations of society, when a locally structured and heterarchical Cornish Iron Age

will be suggested as an alternative to the distinct hierarchy suggested by Quinnell, and outlined above (see 7.6.2).

2.4 The settlement record of the first millennium BC

A range of settlement types, dating to the first millennium BC are present in Cornwall. These are categorised below as; open settlement, pounds, hillforts, rounds, promontory forts and courtyard houses. Underground fogous are also discussed. Whilst not technically ‘settlements’, these structures do tend to feature within or close to a number of the settlement types outlined. Because several settlement types feature across the border in Devon, apparently unchanged, examples from this region have also been drawn into the discussion below.

2.4.1 Open settlement

Isolated examples and groups of unenclosed (‘open’) hut circles are present across the landscape, clustering particularly upon moorland areas, although our understanding of these is restricted by the limited number to have undergone excavation. In Cornwall, the open hut settlements of Garrow (Dudley, 1958) and Sperris Croft have yielded post-Trevisker wares which can be placed within the ‘Earlier Iron Age’, whilst at Bodrifty (Dudley 1957b), occupation of a number of hut circles began in the Late Bronze Age, and continued through the Earlier Iron Age and in to the Late Iron Age. Although occupation appears to have been relatively continuous at Bodrifty, differences in the nature and structure of domestic space are apparent; the Late Bronze Age hut circles are smaller, more elliptical and orientated with their entrances facing south-west, as opposed to the Early Iron Age structures which were larger, more monumental with paved entranceways and stone lined drains, and orientated to the south-east (Fig 2.2). Later, possibly during the 5th century BC, this settlement was enclosed by a

curved wall (Dudley 1957b) making the settlement reminiscent of a larger 'pound' (see 2.4.2 below).

On Bodmin Moor unexcavated sites such as Catshole Tor, Stanning Hill and Twelve Men's Moor have traditionally been grouped together under a Late Bronze Age/Earlier Iron Age date. These settlements do show significant variation in hut size and structure however (Johnson & Rose 1994: 56); Catshole Tor has similarly distinct groups of 'larger' and 'smaller' circular structures (see Fig 2.3), whilst at the larger complex of Twelve Men's Moor, seven of the 16 structures have outer ditches; a trait rarely seen anywhere else on the moor. Prior to any future excavation, both the date of these settlements should be assumed with care. Excavations have taken place at Garrow Tor (see Fig 2.4), although details of these investigations remain sketchy (Dudley 1957a). The pottery assemblage recovered from the site is similar in character to that from Bodrifty, making Late Bronze Age – Earlier Iron Age occupation likely.

In Devon, activity at Dainton (Silvester 1980) extended from the Late Bronze Age through to the Earlier Iron Age, with an extensive field system and numerous stone mounds, some of which may have acted as hut platforms, producing post Deverel-Rimbury wares of the earlier first millennium BC and a hoard of metalworking debris dated to the 10th century BC. No structural evidence was found at Dainton, but although the permanent occupation of this site would thus seem unlikely, discrete scatters of pottery and other debris such as querns around the site may indicate the seasonal use and/or occupation.

Open settlement is currently much less visible for the Later Iron Age, when the number and range of enclosures within the landscape increases. This may have resulted in archaeological attention initially being pulled away from lowland areas where open settlement may have resided and, only very recently, developer-funded excavation around Threemilestone has uncovered twelve unenclosed stone-built structures of LPRIA date, situated between two probable Later Iron

Age or Roman ‘rounds’ (Pitts 2005). Five of these structures were distinctly oval, and thus similar to LPRIA/early Roman structures at Trethurgy and Castle Gotha, amongst others (see discussion below). Despite this new evidence, the overriding impression at present for the Later Iron Age in Cornwall remains one of increasing enclosure and a reduction in open settlement.

Unenclosed structures of Roman date have also been uncovered at Duckpool near Bude, where a series of fairly ephemeral postholes were identified in the sandy soils of the car park associated with Duckpool beach (Ratcliffe 1992). These postholes formed a structure, situated in between two hearths. A number of posts and an additional hearth were found underlying these features, relating to an earlier structural phase, separated by a distinct ash-rich deposit. The presence of lead waste and a stone-lined flue and hearth indicates small-scale metallurgy on site, between the 2nd – 4th centuries AD.

An absence of any enclosure or other monumental remains at Duckpool, and the apparently ephemeral nature of structural features and phased re-building on site make it probable that occupation was temporary and/or periodic, perhaps as part of seasonal agricultural regimes. Duckpool is also important however, because of its unique insight into the utilisation of seaside and beach locations in the Roman period; a practice as yet unparalleled, but one that presumably occurred in the Later Iron Age as well. The constantly shifting topography of this lowland coastal landscape, and the inherently unstable nature of structures built on particularly sandy soils, may well have affected the archaeological visibility of any potential occupation in these areas, but this is not to say that it may not have occurred. Indeed, some of the best preserved insights into the prehistoric landscape of Cornwall and Scilly have been found beneath coastal dune systems (Bell 1984:47).

Groups of courtyard house structures, which originate in the LPRIA and continue into the Roman period also fall into the ‘unenclosed’ settlement category, but due

to the unique nature of these structures, these are considered separately below (see Chapter 5). At Carn Euny and Bosulow Trehyllys courtyard house settlements, several singular stone-built circular structures were occupied prior to their inclusion within or transformation into courtyard house settlements, a process of ‘courtyardisation’ not often acknowledged (see 5.4.2). The earlier phases of these sites, and the more recently discovered structures from Threemilestone (Pitts 2005) hint at a degree of open settlement in the Later Iron Age, comprising classic circular and oval stone-built architecture, currently under-represented in academic literature.

2.4.2 ‘Pounds’

A number of multiple hut circles are present across Cornwall and Devon that are enclosed within large surrounding walls. These settlements are known as ‘pounds’ and generally originate in the Early Bronze Age, although occupation of many continued well into the first millennium BC. In addition, several individual hut circles found within smaller pound enclosures are also occupied during the end of the Bronze Age and into the Iron Age. On Dartmoor, at Kestor (Silvester 1979), a limited assemblage of Early Iron Age wares was found in association with a single circular structure situated within a small enclosing pound. A small bowl furnace and forging pit were also found within this structure, although the chronological relationship between the two is uncertain. Beyond the central pound are a series of unenclosed huts situated within an associated field system.

At Metherrall and Foales Arrishes (Silvester 1979), post-Trevisker wares indicate occupation throughout the first half of the first millennium BC, with some of the wares from the latter site similar to the earliest wares from Dainton (above). The latest Iron Age wares from Foales Arrishes were associated with ironworking phases, although these may not have been contemporary with the latest phases of permanent settlement on site. Finally, at Shaugh Moor the latest structural phase

to be radiocarbon dated produced a date of 970-595 cal. BC (Wainwright & Smith 1980). A lack of obvious 'domestic' features such as hearths, drains and surfaces raises the possibility that this structure may not have had an overtly 'domestic' use, and activity post-dating the latest structural phases at this site is indicative only of occasional or temporary re-use.

Excavations at Gold Park (Gibson 1992) on the eastern fringe of Dartmoor identified a palimpsest of settlement dating to the Later Iron Age, producing insight into the environment and nature of settlement on the moor at a time when, according to current interpretation, these areas had been abandoned for the lowlands. Central to Gold Park was a stone structure, built on top of an artificial platform and within a pound (#5 on Fig. 2.5). This was situated within a range of prehistoric and medieval field systems, running through which was an earth-banked trackway, leading out toward 'open' land. Between the pound and the trackway was a cairn field, consisting of fourteen small cairns.

A charcoal sample from the hearth associated with this stone structure produced a radiocarbon date of 187-35 cal. BC at one sigma. Only one sherd of late South Western Decorated ware was found in association to this stone structure, suggesting that the use of pottery during the latest stages of occupation was severely limited, for whatever reason (see discussion below). Beneath the stone structure, the bedding trench and internal postholes of an earlier timber structure were found. A sample from the charcoal-rich floor of this earlier structure produced a radiocarbon date of 375-176 cal. BC at one sigma. This floor also produced a number of sherds of South Western Decorated wares. Although a turf line between the floor levels of these two structures indicates that some period of time elapsed between the abandonment of the timber structure and the raising of the stone structure, the six radiocarbon dates produced suggest the two phases of construction are virtually indistinguishable; the stone house following the timber phase without any appreciable time lapse (Gibson 1992: 44).

Upon investigation, the bedding trenches, stake holes and postholes associated with four additional timber structures were found underlying the cairn field. South Western Decorated wares were also found in association with these structures, although preservation was generally poor. No dateable material was recovered from the cairns themselves, except for a whetstone and a saddle quern included within the fabric of the structure. Both the cairns and the timber structures that preceded them would thus appear broadly to date to the Later Iron Age. The purpose of the cairns remains elusive. They may represent the active clearance of the moorland, although the form and small size of the cairns might also reflect an active desire to replicate earlier Bronze Age monuments scattered across the region (Gibson 1992). Either way, Gold Park provides valuable evidence for settlement activity on the edge of Dartmoor, when according to current interpretations permanent settlement of the moor had been practically abandoned.

As is clear within the discussion so far, the temporal resolution between ‘open’ and ‘enclosed’ settlement in Cornwall is far from simple, with many settlements reflecting a palimpsest of differing degrees of (non)enclosure over time. Open and enclosed elements to the settlements of Bodrifty and Kestor have already been highlighted, and the later enclosure of individual or small groups of structures also seems probable at Garrow Tor. A similar trend continued toward the end of the Iron Age; at Porthmeor for example, where courtyard houses were built both within and outside of the ramparts of an earlier round. The causes and consequences of the changing nature of enclosure in relation to previously or traditionally ‘open’ settlement, is examined further in Chapter 4.

2.4.3 Hillforts: chronology

Based on a limited amount of excavated evidence, the ‘hillforts’ of Cornwall and Devon appear for the most part to be of Later Iron Age date, although there is

evidence for activity preceding the enclosure of some hilltop locations at this time. The partial enclosure of certain hilltops in the Neolithic is already well documented (e.g. Helman Tor, Mercer 1986; Carn Brea, Mercer *et al* 1981 for Cornwall; Hembury, Todd 1984 and Raddon, Gent and Quinnell 1999, for Devon). The enclosure of specific hilltops during the Bronze Age has only been recognised more recently (e.g. Liskeard junior and infant school - Jones 1998-9a, see below for further discussion).

In Devon and Cornwall most excavated hillforts were occupied for periods between the 4th – 1st centuries BC. In general, hillforts in Cornwall are neither as big, nor as elaborately enclosed as the ‘classic’ developed hillforts found in Wessex and the Welsh borders. The majority have two, three or four enclosure circuits (see Fig. 2.6). There are exceptions; in the unusually large and sub-rectilinear hillforts of Gear and Caer Vallack for example. These latter sites are also notable for their location overlooking the estuary of the Helford river, and their size and situation may reflect a more particular role in trade and exchange during the Later Iron Age. The dating of these sites was recently confirmed though excavations by the *Time Team*, which uncovered evidence for Bronze Age activity at both sites prior to a significant expansion in settlement during the Iron Age (http://www.channel4.com/history/teamtime/hel_dig.html see Fig 2.7).

Only Hembury (1930-35 & 1980-83 Fig. 2.8), Embury Beacon (1972-73) and Raddon (1994) (Devon), and Killibury (1975-76) and Carn Brea (1981) (Cornwall) have been excavated within the last 30 years. Excavations at Raddon have identified the first securely dated Early Iron Age hillfort (Gent & Quinnell 1999), the pottery from which has close parallels to individual forms from Woodbury Castle, Dainton, Mount Batten, Kestor and Blackbury Castle. Here, a palisaded enclosure radiocarbon dated to 810-410 cal. BC preceded the double enclosure rampart of the hillfort which has been radiocarbon dated to 790-390 cal. BC. Palisaded enclosures have also been found preceding the Later Iron Age earthworks at Woodbury Castle and Hembury (Cunliffe 1974: 228).

Elsewhere, a pit with radiocarbon dates of 1252-989 cal. BC and 1277-1040 cal. BC and which appears to have been covered almost immediately by a bank or rampart, may indicate some form of Late Bronze Age enclosure which pre-dated Killibury hillfort (Miles 1977: 89). Late Bronze Age origins have also been offered for a range of additional hillforts such as Cadonsbury, and 'tor enclosures' (e.g. Trencrom see Fig. 2.9) and, as has happened elsewhere, future investigation may well confirm many of these propositions. However, it is worth remembering that without further investigation the Late Bronze Age origins for hillfort sites in Cornwall remains an assumption. Within the current context of interpretation this is helping only to exaggerate a vision of continuity between the Late Bronze Age – Early Iron Age.

In Devon, occupation at the Dartmoor hillforts of Bury Castle and Berry Castle also dates from the 4th century BC – 1st century AD, whilst Cranbrook, Embury Beacon, Hembury, Milber Down and Blackbury Castle have all produced Later Iron Age South Western Decorated wares, with 4th century plainwares also being found at the latter. Similar plainwares have also been recovered from Woodbury, but this hillfort appears to have been abandoned before the time that South Western Decorated wares had become widespread. Activity at Raddon continued into the Later Iron Age but the nature of this activity remains uncertain. An absence of Late Iron Age pottery has led to the suggestion that, as at Gold Park, activity during this period was aceramic (see discussion below). The enclosure circuit at Raddon had been abandoned by the Later Iron Age, with the ramparts and ditches left unmaintained (Gent & Quinnell 1999).

In Cornwall, excavations at Castle-an-Dinas (Wailes 1963), Killibury (Miles 1977) and Castle Dore (Quinnell 1985) all produced Later Iron Age South Western Decorated wares and cordoned wares, although these pottery forms were only found in stratigraphically distinct contexts at Castle Dore (Fig. 2.10), where occupation appears to have been relatively continuous between the 4th century BC

and the mid 1st century AD. At Trencrom (Fig. 2.9), South Western Decorated wares brought to the surface by moles indicate occupation during the 2nd century at least. At Chun Castle (Figs. 2.11 and 2.12) - distinct in having two concentric stone walls rather than the traditional earthen ramparts and ditches of a hillfort - occupation extended from the 3rd century BC to the mid 1st century AD with later reoccupation in the 6th century AD. This site clearly has closer morphological parallels with some of the Iron Age stone forts from western Ireland (e.g. Dun Aonghasa, Fig. 2.13 see Cotter 1993), but the implications of this are confused by the extent to which Chun Castle has been modified by its later use in the early medieval period, which the present author feels is vastly underestimated within current literature.

2.4.4 The role and ‘function’ of hillforts in Cornwall and Devon

Our understanding of the nature of activity within the hillforts of the south-western peninsular has been impeded by a concentration on hillfort ramparts and entrances over interiors, within the limited amount of excavation that has been undertaken. It is commonly argued that the hillforts of Cornwall and Devon, when compared to those from elsewhere in southern Britain, reflect an unusual ‘absence’ of activity and lack of apparent occupation (see Fox 1996). One common aspect of hillforts in both Cornwall and Devon is an absence of grain storage pits; Killibury is the only Iron Age site in Cornwall to produce two ‘possible’ examples and these appear to have been backfilled almost immediately with clean shillet (Miles 1977: 113). Grain would thus appear to have been stored above ground rather than below. Examples of four- and five-post structures, often thought to have been used for above ground storage, are suggested to be rare within hillforts however, as is evidence for ‘roundhouses’ (Quinnell 1986: 115-117). This ‘lack of evidence’ has dominated the interpretation of the social role and function of hillforts in the south-west, and has in turn structured the current model of Late Iron Age social organisation for the region (see below). However,

to borrow a well-coined phrase; is absence of evidence really evidence of absence?

When looking at hillfort function in the south-west, one must always bear in mind how little excavation of hillfort interiors has actually taken place. Within Devon, the excavation of hillfort interiors has been limited to Blackbury Castle, Woodbury Castle and Embury Beacon where, intriguingly, the interior was dominated by possible post-built rectilinear structures, or groups of four-posters (Fox, 1996: 13), rather than the circular ‘roundhouses’ typical of the Late Bronze Age and Iron Age settlement of the region and elsewhere in Britain. In Cornwall, excavation of the interiors at Castle Dore and Killibury produced evidence of dense multi-phase occupation with roundhouses and four-post structures both evident (Fig. 2.14), whilst at Castle-an-Dinas (Fig. 2.15) postholes, gullies and cobbled surfaces were all recovered during minimal excavations of the interior. Many hut circles are also visible within the interior of Chun Castle, although no relative chronology between these was found. More recently, geophysical work by the *Time Team* (17/02/2002) at the ‘hillforts’ of Gear and Caer Vallack on the Lizard found a palimpsest of features and ‘activity’ within their interiors (see Fig. 2.7). Probable Bronze Age barrows and roundhouses were identified, and one likely roundhouse when excavated, was positively identified and dated to the Iron Age. A range of pits, postholes, penannular gullies and ‘domestic’ debris have also been found in areas between the inner and outer ramparts at a number of hillforts such as Killibury and Milber Downs, as well as other forms of enclosure such as The Rumps (Fig. 2.16) and Tregear Rounds.

When considered in relation to the excavated proportions of the interior of the hillforts of the south-west, evidence of occupation and activity is not so wholly absent. And whilst the occupation of some hillforts may appear to be less pronounced and less dense than other settlement types in the region, this does not necessarily reflect the degree to which these sites were visited by individuals or communities. Considering the varied intensity of activity within Cornish hillforts,

including the ‘unfinished hillforts’ discussed below, it seems possible that some of these sites may have been involved in the periodic movement of people in association with transhumant practices relating to the management of livestock. The nature and use of space within hillforts is examined further in Chapter 4.

2.4.5. The ‘unfinished’ hillforts

A number of hillforts in the south-west have been described as ‘unfinished’; when sections of their enclosing earthworks are regarded as incomplete. Often, the topographical situation of a hillfort or enclosure can provide a possible explanation for its unfinished state; when it is located next to a sheer drop or river, for example, but this is not always the case. In Devon, Hunter’s Tor, Cranbrook Castle, Shoulsbury Castle and Natterdon, have been identified as a distinct group of unfinished hillforts, linked by their moorland locations and significantly high altitude (Quinnell & Silvester 1993). Each of these unfinished hillforts is thought to represent the desire to build a defensive centre by a local community as a reaction to an external threat. That threat is then suggested to have diminished before the hillfort could be finished or, alternatively, to have overcome and subdued the constructing communities – again before the hillfort was complete – thus resulting in the ‘unfinished’ nature of the hillfort (Quinnell & Silvester 1993).

Such arguments portray a very simplistic and functionalist approach to our understanding and interpretation of hillforts, and of earthwork enclosures in general. Recent reinterpretations of hillforts as centres for community activity and identity (Hill 1995; 1996; Sharples forthcoming; Stopford 1987), rather than as elite redistributive residences (e.g. Cunliffe 1984, 1991) have focused upon the manner of rampart construction as a mechanism for the physical and symbolic unification of a community. The enclosures of many hillforts are increasingly alluding to processes of communal building, whereby ramparts and ditches were constructed and maintained in sections, presumably by different groups or

‘teams’ of individuals, perhaps households (Giles forthcoming). It is suggested that the area from which this labour was drawn extended beyond that of the actual community which used the hillfort, social labour in this case being offered as part of a reciprocal gift giving between communities (Sharples forthcoming). In this respect it is interesting to note the ways in which previous man-made features of the landscape are often reworked into enclosure boundaries; the earlier reeve encompassed within the ramparts of Cranbrook castle, for example (Collis 1979), similar to the incorporation of Later Bronze Age ‘ranch boundaries’ at hillfort sites in central southern Britain (Bradley 1971; Cunliffe 1995: 30-33). As such, hillforts should perhaps be considered in a similar way to other ‘monuments’: as constantly evolving and transforming social expressions with no single ‘final form’ (see Barrett 1994 for a discussion of this point in relation to Stonehenge).

2.4.6 Rounds

The most prolific enclosure type for the Later Iron Age and Romano-British period in Cornwall and Devon is the ‘round’ (Fig 2.17). These are also described in certain contexts as ‘hill slope enclosures’. Practically, the application of this distinction is problematic and the definition and use of each term varies between authors, and to a lesser degree, between the regions under discussion. ‘Hill slope enclosures’ are a common feature within reviews of Iron Age Devon, when ‘rounds’ are rare, whilst in more general discussions of the south-west the two settlement forms tend to be a feature of both counties: ‘hill slope enclosures’ dominate in western and northern Devon and eastern and central Cornwall, but are absent from western Cornwall, whilst rounds are common throughout Cornwall and north-west Devon (see Todd 1987: 157-168; 1998: 133). Similarly, in accounts of the Cornish Iron Age, ‘rounds’ appear frequently and ‘hill slope enclosures’, rarely (e.g. Johnson & Rose 1994). For some authors there is no distinction between ‘rounds’ and ‘hill slope enclosures’, they are simply different

names for the same settlement form: rounds in Cornwall are hill slope enclosures in Devon (e.g. Silvester, 1979: 181).

Such ambiguity arises seemingly from a lack of consensus regarding the criteria used to distinguish 'rounds' from 'hill slope enclosures'. Morphologically, hill slope enclosures and rounds are very similar, both displaying diversity in form, although circular and sub-circular univallate forms are most common. The main, visible distinction between the two appears to be one of size: rounds are 'normally no larger than 1 hectare' (Cunliffe 1991), whilst hill slope enclosures are 'usually less than 3 hectares...(although) a number...cover up to 8 hectares' (Todd, 1987: 165-166). On this basis, is the distinction between rounds and hill slope enclosures - or for that matter, between them and other non-hillfort enclosures - a valid and meaningful one? There is a large degree of overlap in the actual settlement record, where basic differences of size and form would appear insufficient and insignificant.

All attempts to define and categorise a settlement record have, to differing degrees, the effect of homogenising a diverse archaeological record. The categories and boundaries we create are only meaningful within the context of our own theorised settlement landscape and are always less distinct in reality. Of real significance is the nature of social discourse that is experienced within and through settlement architecture, rather than simply recognising similarities and differences between settlement morphologies (Taylor 2001). In the following thesis it is argued that, rather than reflecting distinct settlement categories or 'type sites', many Iron Age sites in Cornwall simply reflect stages of development within series of potential settlement trajectories, demonstrating degrees of evolution involving for example, full or partial enclosure, the addition of further ramparts and ditches (in some cases turning 'rounds' into 'hillforts') and the development of structures inside rounds resulting in enclosed courtyard house communities.

Arguably, it would be better to stop using the terminology of ‘site types’, as these imply a distinctly static interpretation of a fluid and dynamic settlement record. However, in light of a lack of standardised plans and/or site dimensions via which sites could be re-categorised, the present terminology for the Iron Age settlement record has been retained. Furthermore, the retention of apparent site ‘types’ is in one respect beneficial, as the current narratives for Iron Age social structure are tightly bound within them. It is only when social distinctions are created between enclosure ‘types’, on the basis of their size and appearance, that the effects of categorisation gain greater consequence: as, for example, when Quinnell suggests that hill slope forts in Cornwall represent a distinct stratum of society, somewhere between hillfort elites and the inhabitants of the rounds (Quinnell 1986: 118). As part of the methodological framework for the analyses of spatial and temporal relations at Iron Age sites that follows here, no pre-existing distinctions in status between ‘rounds’ and hill slope forts’ will be assumed. If, then, a ‘subset’ of enclosures of round type were indeed of a different social status to the majority of rounds, this will be clearly apparent within the nature of spatiotemporal relations on site.

From excavated evidence, the date range for rounds in Cornwall extends from the 4th century BC to the 4th, 5th, and in some instances even 6th centuries AD. The Roman conquest of Britain does not appear to alter the pre-existing landscape of Cornwall to any great extent, with many examples of ‘rounds’ maintaining a consistent level of occupation throughout the transition. Not until the 2nd century AD does a marked increase in the number of rounds occurs (Quinnell 2004: 213).

2.4.7. The character of the ‘round’

Trethurgy round (Fig 2.18), excavated in 1972 and 1973, is the only round in Cornwall to have undergone the full excavation of its interior (Quinnell 2004). Although this site has only recently been definitively published, evidence from

Trethurgy has been crucial to the development of existing narratives concerning Roman settlement and society in Cornwall (Cunliffe 2001: 411; Quinnell 1986, 2004; Todd 1987: 227).

At Trethurgy internal structures were situated around the perimeter of the interior, facing inwards, a spatial arrangement that is fairly uniform within Iron Age and Roman rounds (Fig. 2.18 see Chapter 4 for further discussion). From the plan of Trethurgy, further spatially distinct areas are identifiable which can be attributed to different social functions. The area to the south of the entrance is suggested to have been reserved for crafts, crop-processing and storage; the area to the north (which contained the only drain running through the rampart) may have been for animals and possibly refuse (Quinnell 2004: 224).

Also noteworthy is the oval nature of the stone structures at Trethurgy. The development of oval structures as a new building form in Cornwall is one of the few aspects of the archaeological record that appears to closely mark the Roman conquest of Britain, although the origins of this shift can arguably be traced back to the 2nd century BC (Quinnell 2004: 188 and see 5.4.3 for an expansion of this discussion). The presence of oval structures (Fig. 2.19) belonging to the Roman phases of rounds such as Trethurgy, Castle Gotha (Saunders & Harris 1982), Shortlanesend (Quinnell 2004: 187), and the 'boat shaped' buildings at Grambla (Saunders 1972), are all quite distinct from the circular structures of the Later Iron Age, although importantly, they do not replace these entirely.

The community at Trethurgy, Trevisker and Castle Gotha was maintained, for the most part, at the scale of the 'extended household', resident within two or three central 'domestic' structures. This 'extended household' is generally perceived as a relatively 'equal' community within the boundaries of the social group: no obvious differences are apparent in the size or 'status' of structures and there appears to be equal access for structures within the round, to resources outside of the enclosure and to facilities such as storage and internal working areas. The

extensive field system around Trethurgy would have been used primarily for the cultivation of arable crops and some protected pasture (Quinnell 2004: 214-215, 226-227), although more extensive grazing would have been required. It is from this that we gain an impression of relatively self-sufficient and independent communities, who undertook mixed farming regimes and who provided for themselves in terms of their immediate needs for foodstuffs, textiles, pottery, and so on (e.g. Cunliffe 2001: 349; Herring 1994: 54).

At Castle Gotha (Saunders & Harris 1982) evidence of small-scale metal working makes the site unusual, although in other characteristics it appears familiar. Agricultural production is indicated by a range of quern stones; textile production by loom weights and spindle whorls. The vast majority of pottery comprises local South Western Decorated wares and cordoned wares. Castle Gotha does appear to have had more extensive long-distance contacts than many other sites of this period however: some early Roman pottery (mortaria and samian) some of which may have derived from Exeter, a single sherd of pottery from Gaul and several amphora sherds of Spanish form (Fitzpatrick 2003: 14-15; Saunders & Harris 1982: 143). It seems possible that the metal working at Castle Gotha, evidence for which is rare elsewhere in the region, may have been a significant factor in the maintenance of such links.

2.4.8. Additions to the narrative of the 'round'

The account of Cornish rounds has, for decades now, been based around the classic sites discussed above, but more recent excavations of a number of additional round sites (most unpublished), now need to be integrated into this narrative: namely Reawla (Appleton-Fox 1992), Tremouth (Gossip 2003), Tretherras School (Craze et al 2002) and Little Quoit Farm (Lawson Jones 2003). Although excavations at Tretherras School were limited in extent, this site has been important in further defining a marked increase in the construction of rounds in the 2nd century AD. Furthermore, the sites of Tremouth, Reawla and Little

Quoit Farm have provided important additional information regarding the range and nature of activity occurring within rounds during the Late Iron Age and Roman periods, and the extent of contacts between such sites.

At Tremouth, near Penryn developer-funded excavation in 2002 revealed a LPRIA/early Roman enclosure, situated within a Roman and medieval field system (Gossip 2003). Significantly, a late Neolithic settlement of five probable structures and associated late Neolithic grooved ware was also found on the same site. Roman period occupation at Tremouth appears long-lived; marked by a multi-phase post-built circular structure within a two phase curvilinear enclosure ditch. The presence of a very few sherds of Later Iron Age pottery (Gossip 2003: 13) may support a particularly early 'Roman' date for the construction of the structure and enclosure; although placing it in 43 AD only serves to imply an overly simplistic progression from the Later Iron Age to early Roman landscape and of distinct and contrasting 'Later Iron Age' and 'early Roman' identities in the region. In many aspects Tremouth shows strong similarities to other 'rounds' of Roman date, several of which originated in the Later Iron Age. This is perhaps clearest in the oval form of the structure. These structures are described as post-built, in contrast to the stone-built examples found at other Cornish sites in the early Roman period. However, posts are found close to the inner walls of certain oval structures (i.e. at Trethurgy and Penhale round) to provide additional structural support, and Quinnell has postulated that the low walls of oval structures could easily have been removed by plough damage at some sites, leaving only postholes and/or drainage gullies as indications of their previous existence (Quinnell 2004: 188).

Recent discoveries at Little Quoit Farm (Lawson Jones 2003) have offered further evidence for 'specialist' metal-working, undertaken outside of the standard mixed farming regimes maintained by standard 'domestic' rounds of this period. The archaeological record previously offered hints to the occurrence of specialist metal-working activities at certain rounds (e.g. Castle Gotha), but the evidence is

now building to suggest that increasing craft specialisation may have been a trend that developed from the middle Roman period (c. 200 AD), in line with the steady growth of round numbers from this time.

Four distinct phases of activity were evident at Little Quoit Farm. A scatter of Neolithic material was later overlain by a ditched field system of Iron Age and/or early Roman date which itself was overlain in the 2nd century AD by a series of small scoops (presumably with associated superstructures) within a timber palisaded enclosure, approximately 50m in diameter – the first phase ‘round’. These scoops contained a considerable amount of smithing debris but no ‘domestic’ debris (Lawson Jones 2003). In phase 4, the palisaded enclosure was replaced by a ditched rampart; continued metal smithing and probable iron smelting is indicated by a furnace, fire pit and slag pit. Little Quoit Farm reflects the best evidence yet for permanent specialist craft working by a stable round community who may in part at least, have operated outside of the standard parameters of a mixed farming regime, working or producing metalwork in exchange for foodstuffs.

Excavations at Reawla, in Gwinear, identified a ‘round’ dating from the 2nd to 4th centuries AD which once again went through distinct stages of development, with the early 2nd century univallate enclosure being replaced by a second larger enclosure during the later 2nd century AD (Appleton-Fox 1992). A single circular structure is associated with the first phase of the round, identified by a drip gully but no actual structural remains (Appleton-Fox 1992: 75-77). Whether this does indeed reflect the existence of a domestic structure, or rather some form of stock enclosure (as suggested at Trevinnick) or ‘out house’ (as suggested at Trethurgy) is not necessarily important; what Reawla does conform to is the limited extent of activity or ‘occupation’ within the early phases of some of the later rounds in Cornwall – a sequence not portrayed in some of the earliest excavated examples (e.g. Trevisker, Castle Gotha).

2.4.9. Comparisons for the ‘round’

From the excavated data, the majority of sub-rectilinear and rectilinear ‘rounds’ in Cornwall appear to be Roman in date. The smaller examples are sometimes still described as ‘rounds’, but larger examples, such as Carvossa (Fig. 2.20) and St Mawgan-in-Pyder (Fig. 2.21) are often termed ‘enclosures’. Interestingly, a higher proportion of enclosures found as cropmarks/earthworks in Devon are rectilinear/sub-rectilinear than in Cornwall, and from the sample already investigated (e.g. Gittisham and Black Horse, Reed and Manning 1994; Rewe, Turnspit and Overland, Uglow 1985; Holcombe, Pollard 1974; Pond Farm, Jarvis 1976) it is clear that a reasonable number of these will turn out to belong to the first millennium BC and Romano-British periods (Griffith 1994).

Aside from the clear extension of ‘round’ form into Devon, several other regions have been suggested to have comparable settlement types, although the interpretative value of such comparisons is open for debate. Traditional comparisons focus upon the shared similarities between the ‘rounds’ of Cornwall and Devon and the ‘raths’ or ‘ringworks’ of northern Wales. Morphologically these sites share a number of distinct traits with rounds, notably their relatively small size and univallate enclosure (see Fig. 2.22). However, ‘raths’ in Wales appear to originate in the Earlier Iron Age and rarely continue into the Roman period (Williams and Mytum 1998). The spatial arrangement of structures within certain raths (e.g. Walesland rath, Dyfed) is also notably different, with circular structures occupying the centre of the interior, and four post structures occupying the periphery (see Fig. 2.22).

Cunliffe emphasises the shared similarities between Wales and Cornwall, summarising them as regions densely settled by enclosures, the basic social units being the family or extended family (Cunliffe 2001: 349). Whilst these regions are indeed similar to one another in aspects of the settlement record, they also display distinct differences: most notably in the presence of military forts in

southern Wales but not to any extent in Cornwall, and the presence of ‘fogous’ in Cornwall but not in Wales. Whilst at one scale such comparisons can be informative, the extent to which they provide useful evaluations of shared social practices is less certain.

Other comparisons have been made between Cornish ‘rounds’ and the ‘ringforts’ of Ireland; circular and sub-circular enclosures defined by one or more earthen banks and external ditches, or by a stone wall (Henderson 2000: 128 see Fig 2.23). This very broad group of settlements is thus further divided into earthen examples (raths) and stone examples (cashels). Although in this instance the dating evidence would appear to place these settlement forms to the Early Christian period, a number of factors may be combining to mask an earlier origin. Edwards (1990) has highlighted the potential processes of replacing timbers within these dry stone constructions, which could result in an over-representation the later, early medieval timbers being dated. However, if ‘ringworks’ were occupied in both the Iron Age and early medieval periods, a certain number of examples abandoned during the Iron Age might be expected. Whilst a couple of Iron Age dates have been produced from various sites, this number is not as high as it might be. Of the 47 excavated examples of raths around Ireland two thirds produced date ranges with a mid point between 600-900 AD, with only a couple of dates being earlier (*c.* 300BC) (Stout 1997).

Contrary to these ‘late’ dates, Henderson (2000) has suggested that many excavated cashels have in fact produced evidence for prehistoric activity, whilst many thousand more remain unexcavated, and are simply assumed to be ‘Early Christian’. Iron Age activity, he argues, can be identified in association with the ringfort contexts at the Rath of Synods (Co. Meath), Lugg (Co. Dublin), Feerwore (Co. Galway), Carraig Aille 1 and 2 (Co. Limerick), Cahercommaun (Co. Clare) and Kiltera (Co. Waterford). Often, the prehistoric evidence from these sites has simply been interpreted as residual, or as belonging to earlier open settlement beneath the ringfort.

A more fundamental bias to our understanding of the dating of 'ringworks' seems likely to be the dates procured from metal work, which at present is dated almost entirely to the early medieval period. Several authors (e.g. Champion 1989: 293) have highlighted the poor preservation of iron, which may help to explain in part the absence of metalwork from the 'earliest' Iron Age and the relatively small sample of La Tène metalwork that we currently have for the Early Iron Age in Ireland. Poorly preserved iron artefacts are often near impossible to identify and/or date, and without any additional material culture or a settlement context to aid identification, some early material may have been overlooked and allocated to the Early Christian or even Modern periods. The tiny amount of domestic ironwork currently dated to the Early Iron Age has largely only been recognised by its association with finer metalwork of La Tène style. As such there is the possibility of an as yet unrecognised body of transitional period iron artefacts from Irish sites (Cooney & Grogan 1999: 175).

Finally, a number of parallels to the Cornish 'round' may exist in Brittany. Although the nature of later prehistoric settlement in this region is still incompletely known, the principal settlement type up to c. 200 BC appears to have been a banked enclosure of fairly small size (Bastide 2000 Fig 2.24). Importantly, a number of known examples in Brittany also have an outer ditch, a feature rare but not unknown in Cornwall (i.e. at Goldherring). These univallate settlements in Brittany are suggested to have enclosed a group the size of a household or extended household, once again comparable with the 'round' (Cunliffe 2001: 345), although excavated detail of such settlement is limited (e.g. Giot 1995).

2.4.10 Promontory forts

Coastal promontory forts or ‘cliff castles’ are headland promontories enclosed by a series of ramparts and ditches. In addition to being present along the cliffs of Cornwall and Devon, cliff castles also occur on the coasts of the Channel Islands, the Scilly Isles and the Isle of Man, on the western coasts of Ireland and Brittany, and at various points along the coasts of Wales, Scotland and Orkney (Lamb 1980).

The Cornish cliff castles of Maen Castle (Herring 1994) and Trevelgue (Nowakowski 2000) have both produced post-Trevisker wares of Early Iron Age date, although some of the more ambiguous Earlier Iron Age sherds may in fact be Late Bronze Age (*c.* 800 BC). On current understanding these are the earliest examples of cliff castles in the south-west. At Gurnards Head (Gordon 1940 Fig. 2.25 and Fig. 2.26) several sherds of post-Trevisker plainwares have also been identified, although the bulk of this assemblage appears to be later, probably 4th and 3rd centuries BC. Several cliff castles are also known on the Devon coasts, although fewer examples have been excavated. Devon does have the largest cliff castles of the south-western peninsula however, notably Dodman Point (Gorran), Hillsborough (Ilfracombe) and Wind Hill (Lynmouth). This latter example is the largest, enclosing approximately 52 ha (Todd 1987: 164). In Cornwall, only Trevelgue Head is of comparable size.

Cliff castles, where they occur, are fairly standardised - in part due to the prescriptive nature of the site type, enclosing a coastal promontory (Fig. 2.27). Having said this, a variety in size has also been highlighted, as well as a variety in the nature of enclosing ramparts and ditches. At Gurnards Head cliff castle for example, the rear of the rampart was stepped, a feature with direct parallels to the ramparts of Castel Coz and Castel Meur, two cliff castles on the Breton coast. Although no firm dating evidence is available for the Breton cliff castles, parallels with Cornish examples such as those above do indicate a broadly equivalent date of construction, within the second half of the first millennium BC.

Similarly in Ireland, around 250 cliff castles occupy the rugged coastline and for the vast majority a later first millennium BC date is assumed, although once again no secure dating evidence has been recovered. In Wales, a series of radiocarbon dates from Llantephan Castle cliff castle suggest an early Iron Age date, contemporary to the earliest Cornish examples, whilst several others have produced pottery and occupational debris dating to the final century BC/1st century AD (Cunliffe 1991: 268). Any structural evidence at the Welsh sites has, in general, been recovered from directly behind the innermost ramparts, although this may in part be due to biases of preservation and the focus of excavation, rather than any real spatial arrangement.

As previously discussed, within the current orthodoxy cliff castles are regarded as performing a range of functions. They are frequently teamed with hillforts as sites with a seasonal resident elite, and the size of the enclosed headland is often used as an indicator of the power of the occupants (Todd 1987: 165). The setting and substantial enclosure of the vast majority of Cornish cliff castles makes them, by their very nature, dramatic and impressive and it may well be the case that many of these sites were associated with a degree of social 'power'. This may not have been invested within one individual and may have served the ritual needs of the community rather than the political or economic however. Several cliff castles contained small circular Iron Age structures and their coastal location and in some instances, ample grazing area may have made sites such as Gurnards Head good for containing and protecting livestock such as sheep, as part of annual transhumant practices. The occupation layers from structures within Gurnards Head were also suggested to have been indicative of periods of short-term occupation (Gordon 1940: 100).

Due to their coastal position, cliff castles are often associated with long-distance trade in prehistory. Certain sites, such as Hillsborough, Wind Hill and Trevelgue Head do occupy positions close to natural 'harbours' but this evidence does not explain why these cliffs, with their rocky coastlines, were chosen as the locations

at which to trade, as opposed to the areas immediately surrounding the natural harbours, as appears to have been the case at Hengistbury and Mount Batten. Furthermore, the classical sources allude to 'neutral' ports of trade (notably 'Ictis', generally thought to be St. Michaels Mount), which served as trading centres. Thus, whilst cliff castles may have been important locations from which people looked out to the sea, to understand or commemorate the sea's role and the contacts and material it carried to the region, they seem unlikely to have been locations which actually received merchants, traders and visitors, or the transactions that accompanied them (Cripps & Giles forthcoming). Once again, this role may have resulted in the periodic and temporary occupation of these sites, rather than any permanent residence.

In Cornwall, a perception of age or antiquity associated with certain coastal promontories has been identified as a potential factor to their enclosure as cliff castles. Sharpe (1992) has suggested that the distinctly rocky, granite filled nature of certain cliff castles such as Treryn Dinas may have led Iron Age peoples to associate them with earlier Neolithic Tor enclosures further inland, such as Trencrom, and the Neolithic communities who used them. In this way, Sharpe suggests that Iron Age cliff castles may have been invested with purposeful associations with the past, or with the 'ancestors'. If this was the case, a hypothesis could be proposed to suggest that the primary concern for the majority of cliff castles related to the negotiation of spatial and temporal distance; to the 'other', over both time and space (Helms 1988, see also Cripps and Giles forthcoming).

2.4.11 Courtyard houses

Courtyard houses are structures which, in form and chronology, are unique to Cornwall and on present understanding more specifically to West Penwith (see Fig. 2.28). Courtyard houses comprise a series of differently shaped and sized rooms, each of which is located off of a central, often paved, area (see Fig. 2.29).

This area is traditionally viewed as having provided an open ‘courtyard’, hence the term ‘courtyard house’ which was formalised in O’Neill Hencken’s report of excavations at Chysauster (O’Neill Hencken 1938: 238).

Courtyard houses have thick stone-faced walls with earthen and rubble cores, central courtyards with a variety of different ‘side rooms’ (circular, oval and or/rectilinear) and long, often paved, entrance passages (Christie 1997: 10-11). Most courtyard houses also incorporate covered drainage gullies leading from the courtyard out to the exterior of the house (Wood 1997: 95). Larger round rooms are often, although not always, located directly opposite the main entrance passage. The spatial dynamics of the courtyard house are discussed in further detail in Chapter 5.

Courtyard houses are usually grouped in ‘villages’ of more than two courtyard house structures, and are occasionally found in association with contemporary or pre-existing hut structures. Individual structures also frequently have attached terraces, described as ‘garden plots’, and groups of structures are often situated within extensive stone-built field systems. Today, the largest number of extant courtyard houses at a single site, are the nine structures at Chysauster (Fig 2.30). However, early antiquarian descriptions for several sites exist in the SMR, with upwards of 30 or 40 courtyard houses noted. Many courtyard house structures and possibly even villages are likely to have disappeared through land clearances during the last 2000 years. Whilst this would imply a more densely settled courtyard house ‘landscape’ however, the geographical distribution of these structures – restricted to the uplands of West Penwith – is not contradicted by antiquarian commentaries. The restriction of courtyard houses to West Penwith may well be linked to metal resources (particularly the tin lodes), which also occupy the locality.

2.4.12 Roofing a courtyard house

The overall appearance of the courtyard house relies crucially upon the nature of roofing for the structure, on which there is no current consensus. Traditionally, courtyard house structures are regarded as having an open courtyard and individual roofs for each room, the arrangement favoured by English Heritage (see Fig. 2.31). More recently Wood (1997) has suggested that this method of roofing is not plausible, suggesting that the size and build of the walls would not have been able to support the weight of individual roofs and that the angle of pitch of separate roofs would have directed rain water inwards to the earth and rubble core of the walls, eventually leading to their collapse. The 'flat' roofing envisaged for the longer rooms of a courtyard house structure would have also leaked, it is suggested, and as a result, Wood envisages a single ring-beamed roof for the courtyard house structures of West Penwith (see Fig. 2.32).

Wood's critique is given further support by recent attempts to reconstruct a similar form of structure in the Western Isles. These 'figure-of-eight' structures are perhaps the closest parallel to courtyard houses, with four, dating to the 6th-8th centuries AD only recently being discovered in 1992 at Bosta Beach, on the small island of Great Bernera (Neighbour & Crawford 2001). Attempts to rebuild the roof of a reconstructed figure-of-eight house proved to be the most contentious aspect of the project and initially, separate pitched roofs were favoured for each room. Due to the same structural issues raised by Wood however, a hipped roof for the entire structure proved more effective (see Fig. 2.33).

There remain concerns with the theory of a single roof for all courtyard houses. The most fundamental issue concerns the practicalities of roofing such a vast structure. The total diameters of courtyard houses in Cornwall range from c. 12m to c. 28-30m, and in the majority of cases the structure is distinctly oval. Being oval, the length of the rafters required to support the roof can be shorter than they would need to be if the same floor area was being covered by a circular roof. This makes the issue of roof construction less complicated, and more feasible, than if

these structures were more circular and smaller. In the case of the courtyard house then, a pitched roof, as was reconstructed at Bosta appears plausible, for oval structures with a length of *c.* 19m or less (Pope 2003: 100). Further support for at least some courtyard house structures being covered by a single roof can also be taken from the evidence of the smaller oval structures of early Roman date in Cornwall (e.g. at Trethurgy, Penhale, Castle Gotha etc) which also appear to have been roofed using rafters and trusses set on the top of the walling, the main weight of which would have been carried by the wall (Quinnell 2005: 189-196, see Fig. 2.34).

Issues of warmth and light within courtyard house structures are also of concern. In terms of warmth, the lack of any hearth apparent within the vast majority of 'courtyards' is in stark contrast to those found within the peripheral rooms of the structure. This has traditionally been seen to reflect the 'outdoor' situation of the courtyard. However, if this 'indoor' courtyard area was not used for daily living, especially in winter, but rather, for example, for the protection of stock overnight, one would not necessarily expect there to have been any permanent hearth.

Of greater consequence are concerns with amount of light that would have been available within the courtyard and side rooms of a courtyard house, had the entire structure been enclosed with a single roof. There is certainly no evidence for windows within the outer walls of existing structures, making the only natural light source available that from the entranceway. If some courtyard house structures were indeed enclosed beneath a single roof therefore, issues of light and warmth would have restricted the use of the 'courtyard' for daily activities such as cooking, eating and craft specialisations, to the daytimes – and to the summer primarily. This said, it also seems quite possible that both roofing options could have been in use with, particularly the smaller courtyard house structures, employing a single hipped roof, whilst larger structures opted for an 'open' courtyard.

Goldherring is one of the few sites to produce evidence for ephemeral hearths within the 'courtyard' of the structure (possibly making its inclusion under a single roof more probable). This site is also unusual in being situated within a larger enclosure, defined by a perimeter wall. Similarly at Porthmeor (Fig. 2.35), the outer enclosure may have provided the role of an open 'courtyard' and might help to explain the potential incorporation of the entire courtyard house structure under a single roof.

2.4.13. Courtyard house development

The presence of courtyard houses in Cornwall has often sought explanation in the form of cultural influences and/or invasion. Parallels have been drawn with the dry-wall structures and enclosures of northern Wales (Guthrie 1969: 5), although the affinities of these Welsh examples are closer to the grouped structures attached by lengths of walling found on Dartmoor, and at sites such as Bodrifty and Bosulow Trehyllys, than they are with courtyard houses. Most recently, Quinnell (1986: 120, 2004: 188) has argued that all courtyard houses are Roman in date; the implicit inference being that their evolution resulted from the social changes, cultural influences and possible migrations that transpired in Cornwall as a result of, and after, the Roman conquest of Britain. In light of these arguments, it is interesting to note the earlier discussions of Thomas (1963), where an emphasis was placed upon the environmental factors conditioning courtyard house development during 'the latter part of the Cornish Iron Age by conservative pastoral elements in the granite uplands' (Thomas 1963: 28).

Whatever the reasons for their development, the segmented nature of a courtyard house, and the numbers in which courtyard house structures gathered, almost always without any additional 'enclosure', make these structures very different from the forms of Later Iron Age settlement elsewhere in Cornwall. This in turn suggests a very different way of living, and presumably, a differing social

framework or local organisation being adopted by courtyard house communities. This would not be dissimilar to other regions of Britain during the Iron Age, where variations in the nature of settlement have been used as an initial indicator of differential social structures at a local scale (e.g. Hingley 1984).

2.5 Fogous

Fogous are subterranean stone-built passages, often with associated chambers, found most frequently in western Cornwall (Clark 1961; Startin 1982). These structures are morphologically very similar to underground passages found in Scotland and Ireland, where they are known as 'souterrains'. In Cornwall, the majority of fogous are stone-lined, and roofed with massive stone lintels (Fig. 2.36). In Scotland the predominant roofing material appears to have been of thatch. Several above-ground 'fogous' have also been suggested in Cornwall (e.g. Clark 1961: 67-73; Jones 1999), although how useful this association is for these structures is doubtful (Fig. 2.37).

Due to fundamental similarities in situation and form, Clark (1961: xv) suggests divergence from a common source for the fogous or souterrains of Cornwall, Ireland and Scotland, rather than a local and independent development. Fogous and souterrains are regarded as elements helping to create 'western Atlantic identities' (Henderson 2000). The dating of Iron Age structures and material culture in Ireland is notoriously difficult however, and on present evidence the souterrains of Ireland would appear to be significantly later than those of Scotland and Cornwall (Champion 1989: 295).

In contrast to Scotland and Ireland, the fogous of Cornwall and the souterrains of Brittany are discussed largely in terms of their differences. Because of the tendency to interpret these structures in terms of a ritual or religious function (see

below), this emphasis has led to separation of Brittany and Cornwall in terms of religious influence (Quinnell 1986: 118). However, it is surely questionable whether certain areas of social practice can be abstracted in such a way, when in other areas of settlement and material culture, the connections and influences between these two regions appears strong (in for example, the distinct similarities in cliff castle form). Indeed, the likely 'ritual' aspects to cliff castle construction, highlights the virtual inextricability of 'religious' and 'domestic' influences within prehistory.

2.5.1 Fogou 'function'

Three main theories surround the interpretation of fogou function: underground storage, refuge and 'ritual' practice. Underlying each of these interpretations is the consistent location of fogous within close proximity of a 'settlement'. Various authors have suggested the use of fogous for the storage of arable and pastoral surplus, particularly grain, as well as for other 'valuables' (e.g. Clark 1961: 136; Gent 1983). However, the damp environment of the underground fogou would have made it particularly unsuitable for the storage of produce such as grain, root vegetables or dairy products, whilst the frequent difficulty of access would mitigate against the storage or protection of animals (Maclean 1992: 44-47). One possibility, apparently not discussed within the archaeological literature, is the storage of wet fodder, for which the conditions would be quite favourable (Tony Legge pers. comm.).

A place of refuge was the traditional interpretation for these structures and has found new support recently (e.g. Maclean 1992). The basis of Maclean's support is grounded within an impression of a hierarchical and warlike 'Celtic' society. Fogous, she suggests, provided nearby subterranean refuge and protection to a community, from an 'ever present threat of raiding' (Maclean 1992: 53). Indeed, Maclean argues that the mere existence of a fogou would act as a deterrent.

However, if indeed warfare was ‘endemic’ within the Iron Age, retreating to an underground passage, which most frequently was also a dead end, does not seem to make much sense. The entrance ways to fogous were not hidden, and whilst some had additional side creeps and passages, these too would have been locatable from above ground. For the purposes of hiding, fogous work well initially, but for purposes of escape they are, by nature, fundamentally flawed.

The final theory, that fogous relate to ‘ritual practices’, appears more probable, although how much closer this term takes us in the understanding of these structures is debateable. The presence of wall carvings at the western entrance of Boleigh fogou, possibly anthropomorphic in design (Clark 1961: 62), and of cremated human remains below the paving of the corbelled chamber and foundation trench at Carn Euny (Christie 1978: 431) may indicate ‘ritualised’ practices undertaken in association with these venues. The dark nature of these places and the difficulty with which they are accessed may also have helped to give them a feeling of ‘otherness’, as locales divorced from daylight and everyday ‘living’ (Fig. 2.38).

If we consider the nature and location of these structures once again, however, a further ‘function’ may be inferable within this broader interpretation of ‘ritual’ use. Several fogous such as Halligye and Carn Euny are directly associated with the entrance and exit to and from a settlement or structure, and at others like Chysauster, the original extent and association of the related settlement is uncertain. Considering the emphasis witnessed elsewhere in Iron Age Britain, upon the formalisation and elaboration of entrance ways, could it be that some fogous were built in part to formalise or affect the process of entering or exiting a site or structure – formalising a transition from one social and spatial locale, to another? As with hillforts (Hill 1995; Sharples forthcoming), fogous may incorporate aspects of defence, storage and ritual to differing degrees, spatially and temporally specific to the context of the communities these structures served.

That these structures lend themselves to 'ritual' associations is not in doubt. A great deal of mystery has surrounded fogous in the recent past, with contemporary stories often involving associations to devilry and witchcraft (e.g. O'Neill Hencken 1932: 148). In more recent times, fogous have continued to provide individuals with a link to a spiritual 'other', reflected in, for example, the depiction of mental images drawn from the experience of these sites (e.g. Cooke 1993). Much of this contemporary interest surrounding fogous has been used to provide the basis for suggestions that sun worship, druidism and shamanism were prevalent in Cornwall's later prehistoric past (Jones 1999). As products of twentieth-century attitudes and experiences however, these modern associations are very much distinct from any argument used within academic discourse suggesting a 'ritual' function for these structures.

2.6 Field systems and palimpsest landscapes

Iron Age settlements in Cornwall, particularly rounds, open settlements and courtyard house structures, are frequently situated with often quite extensive field systems. In some instances, these field systems appear likely to be Iron Age in origin, at least in part (e.g. at Chysauster: Christie 1997; Forge: Herring 1992; Gwithian: Thomas 1964; Forrabury: Wood 1963). Frequently however, the integration of later prehistoric settlement and field systems reflects a complex palimpsest of landscape activity with many Iron Age sites located within earlier Bronze Age field systems and amongst earlier Bronze Age settlement (e.g. on Bodmin Moor Brisbane & Clews 1979; Johnson 1980; Johnson & Rose 1994 and further west e.g. Herring 1994, Johns 2000; Thomas & Ratcliffe 1984).

Some of the best preserved sequences of land division and cultivation has been found beneath coastal dune systems: at Gwithian, for example, layer five (1600-1013 cal. BC) contained prehistoric field boundaries and evidence for cross-ploughing and spade cultivation (Megaw 1976). Other important archaeological

sequences have been uncovered beneath dunes at Harlyn Bay, Constantine Bay and Mawgan Porth (Bell 1984: 47). Evidence for palimpsests of Bronze Age and Iron Age settlement and enclosure are fairly ubiquitous inland, and the density of landscape features of likely later prehistoric date is one of the clearest themes to emerge from the landscape mapping programme (Young 2001). This density of landscape use was also apparent through a series of geophysical surveys undertaken by the author (see Appendix 3). At Carvossa, for example, several curvilinear ditches of probable Bronze Age date are evident underlying the Later Iron Age and Roman enclosure, which may reflect earlier enclosures on this site (Fig. 2.39).

2.7 The Late Bronze Age/Early Iron Age transition and social practices

This summary provides a feel for the variability and complexity of settlement from the first millennium BC in Cornwall. However, this review also highlights some inconsistencies in the ways in which the archaeological record for Cornwall is currently approached, and raises some questions which are best posed now, prior to any spatial analyses.

Consideration must be given to the nature of settlement development in the Early Iron Age as this provides the backdrop against which discussion of the spatiotemporal relations, community and identity of Iron Age society will be set. Current consensus suggests a strong degree of continuity between the Later Bronze Age and Early Iron Age of the south-west peninsula:

‘A basic and broad chronological marker at the best of times, the introduction of iron in the south west appears to have been even less significant than in the rest of Britain, with no dramatic changes in settlement or material culture occurring until around 400 BC’

(Todd 1987: 154).

Whilst the evidence for Late Bronze Age and Early Iron Age settlement in Cornwall and Devon is limited, the suggestion that it is stagnant – marked by similarity and continuity – is simply not representative. Based on pottery chronologies, it is difficult to discern changes in the settlement record during the early to mid first millennium BC. If the focus is directed to the nature and use of settlement however, change over time becomes clearer to observe. New forms of settlement do become visible in the Early Iron Age and traditional settlement forms are given new expression within a transforming landscape. The grammar of the Early Iron settlement landscape is different from that of the Late Bronze Age.

Whilst limited, those excavated settlements which bridge the gap between the Late Bronze Age and Early Iron Age underwent a form of transformation towards the middle of the first millennium BC. At this time (c. 800-600 BC), ironworking became the focus at the established settlements of Kestor and Foales Arrishes, and was the main feature at the new site of Trevelgue (Nowakowski 2000). Kestor and Foales Arrishes also witnessed a decrease in, or lack of, apparent occupation, coinciding with the point at which the role of metalworking became more visible, and perhaps more crucial to their identity. At other transitional sites, such as Dainton, a lack of any obvious domestic structures brings into question its permanent occupation. Similarly, at Shaugh Moor, occupation by the beginning of the Early Iron Age has become less intense than that of the Late Bronze Age, possibly even temporary or seasonal.

A shift thus appears to have taken place during the Early Iron Age whereby specific sites were established or transformed, with limited or reduced evidence

for intense occupation and the adoption of ironworking as their apparent focus. Contrary to the traditional narrative, the introduction of iron does appear to have had an impact on the settlement record in the first half of the first millennium BC, with ironworking becoming the focus of activity at specific sites where 'domestic' settlement had visibly reduced or was unapparent. Do these sites reflect new communal foci for Early Iron Age communities who, in the midst of climatic deterioration, were re-establishing themselves in lowland areas and transforming their use of the upland landscape? Interestingly, Foales Arrishes, Kestor, and Shaugh Moor are all situated on the edge of Dartmoor, whilst the coastal location of Trevelgue can also be seen as 'liminal', or 'peripheral'. This has interesting implications for discussions concerning the socially peripheral nature of ironworking within Iron Age societies in Britain (e.g. Hingley 1997).

The settlement of the moorlands of Devon and Cornwall certainly appears to have decreased during the beginning of the first millennium BC (Quinnell 1994). However, the use of the uplands does appear to have continued into the Early Iron Age, albeit in a different and less intensive fashion. A shift toward intermittent or seasonal occupation, associated with small-scale ironworking, seems to have been a feature of several sites. If such sites were incorporated within new pastoral regimes which saw the transhumance of people and animals to the uplands at certain times of the year, the cultural remains of the uplands would still have been experienced on a routine basis. These locales would have appeared familiar as places that were once densely inhabited, and yet their partial abandonment may also have made the landscape somewhat distant: the ageing desolate lands of past generations.

2.8 Enclosing the landscape

The increasing enclosure of settlement is also an apparent feature of the Early Iron Age landscape, although once again it is important to remember that the

apparent absence of Later Iron Age open settlement may be being exaggerated by its comparative invisibility above ground. However, this is not to deny an actual shift to enclosure at certain sites such as Bodrifty and Kestor which are occupied from the Late Bronze Age and Early Iron Age and into the Late Iron Age. When viewed alongside the situation of new settlements such as Sperris Croft this could be seen as part of a bigger transformation in settlement which aimed to dominate and territorialise broader areas of space and make a deeper physical and visual impact on the landscape.

New settlement forms *do* also appear in the Early Iron Age. Alongside the pioneering settlements of Maen Castle and Gurnards Head, radiocarbon dating has allowed us to identify the Early Iron Age hillfort at Raddon as the earliest known hillfort in Devon. Occupation at Wicca round, close to Sperris Croft, has been dated to the Early Iron Age, making it one of the earliest examples in Cornwall. In the case of Maen Castle and Gurnards Head, it is perhaps better to view the arrival of this ‘new’ settlement form in terms of a transformation of place, as their location marks a continuity of tradition of veneration of specific coastal venues that began in the Neolithic (see Sharpe 1992). This is also true of the cliff castles of the Later Iron Age (see below). This raises the important point that whilst the first half of the first millennium BC was a period of transformation rather than continuity, the transformations in the settlement landscape that did occur were often developed with reference to an earlier, lived landscape, and to the communities within it.

2.9 Cornwall in context

In the discussion above, attempts have been made to highlight potential comparisons between the settlement record of Cornwall and other regions along the western Atlantic seaboard. The extent to which these similarities might constitute a ‘western Atlantic identity’ is discussed in relation to the spatial

analyses of Iron Age settlement in Cornwall in the following chapters. However, before considering the geographical and social context of Cornwall in this manner, a brief summary of the current understanding of the extent of contacts between Cornwall and north-western Europe, during the Later Iron Age, is useful

It is argued below that Cornwall in the Later Iron Age was an archaeological 'melting pot' of reflexive influence from the regions of the western Atlantic seaboard and the Mediterranean, rather than merely a passive recipient of external material culture and ideas, drip-fed from a 'core' of contact in south-eastern Britain. Contacts between Britain and western Europe appear to have adapted alongside the changing needs and energies of the centres of innovation in west central Europe over time (Cunliffe 2001: 311-329). In the 8th and 7th centuries BC, contacts with northern France across via the North Sea become more prominent, indicated by the presence of certain artefacts such as Gündlingen type swords (Fig. 2.40). The Atlantic seaways during this period are much less evident within the *material* record, leaving Cornwall and much of the western coast of Britain seemingly 'divorced' from any form of contact at this time (a suggestion that is challenged by the spatial analyses applied in chapters 4 and 5).

By the 5th century, the dominant centre of social transformation in Europe shifted to the Bourges-Marne-Moselle region, and with it, the main routes of contact, trade and exchange (Cunliffe 2001: 322-323 Fig 2.41). It is during this early La Tène period that the Atlantic routeways, accessed via the Loire and the Garonne, are suggested to have become more important in accessing central Europe and the Mediterranean. During this period, a degree of contact between Cornwall and northern Iberia, via the western Atlantic, is evident; in the duck stamped wares from Carn Euny (Christie 1978: 396-397), for example. Ceramics from the 5th and 4th century BC in Cornwall are stamped in a manner reminiscent of contemporary Amorican wares (e.g. Christie 1978: 397; Cunliffe 2001: 350). These are replaced by a distinct shift from the 4th century, to South Western Decorated wares. Locally produced, and frequently using the Gabbro clays of the

Lizard, the patterns of decoration vary slightly across Cornwall and Devon indicating localised adaptations of design and manufacture (Harrad 2003).

In the final centuries BC contacts between Cornwall and other Atlantic communities remain in evidence. These contacts are broadly contemporary with a period of more intensive relations between south-eastern Britain and Europe. Maritime links along the northern coast of Iberia, as far as Aquitania are reflected in the high numbers of unusual fibulae, characterised by an upturned foot ending in a decorated disc, distributed within these regions (Cunliffe 1984: 3-5). Examples of these brooches also reached the cemeteries of Mount Batten in Devon (Cunliffe 1988) and Harlyn Bay in Cornwall (Whimster 1978). Their depositional context has even led to the suggestion that they reflect marriage alliances between the south-western peninsula and northern Iberia (Cunliffe 2001: 345). The influence of the Mediterranean upon the development of 'western Atlantic identities' is also suggested to have resulted from a vibrant tin trade focusing upon south-western Britain (albeit traded via central and south-eastern Britain) and Iberia (Cunliffe 2001: 348; Gerrard 2000: 21-23). The nature of this trade is more fully explored in Chapter 7.

3. Spatiotemporal Relations and Scale

3.0 Summary

The central theme of this thesis concerns the spatiotemporal relations within and between the Iron Age and early Roman communities of Cornwall. The term '*spatiotemporal relations*' is used here to denote the human relationships created within and manifest through the structuring principles of three-dimensional space and time. It has long been recognised that the built environment has a significant role in the creation and reproduction of human identities and discourses of power (e.g. Barrett 1994; Kent 1990b; Parker Pearson and Richards 1994a; Tilley 1994). Buildings are not simply a passive reflection of transformations in technological ability and cultural values, but are active constituents within the reproduction of communities. To paraphrase Churchill, we do shape our buildings, and our buildings do shape us (The Churchill Centre 2006).

In the first section of this chapter, a summary of the debate surrounding the reflexive relationship between space and identity is offered. The role of time as an active consideration in the creation and negotiation of space, the built environment and identity is also reviewed. All human action is composed through a framework of temporal and spatial understanding and as such, time and space are active constituents of human relationships rather than being simply passive constraints. Time and space inevitably inform and aide social being, be they acknowledged or not.

It is useful to reiterate that one of the key arguments of this thesis is that the control of time, or rather, the control of the *perception* of time, was crucial to the

reproduction and transformation of identities and discourses of power within small-scale prehistoric communities. Indeed, it is proposed that a consideration of space and time as reflexive entities in the organisation of the built environment is vital, as to consider one without the other is to misinterpret the context and development of the cultural traditions and personal choices of embedded agents, within the duality of structure. It is this premise that is explored in greater theoretical detail below.

The second section of this chapter offers a consideration of previous approaches toward the examination of space-time and identity within the archaeological record. The approaches chosen for discussion have had a direct impact upon the methodology advocated in this thesis and where possible, links between this discussion and the proposed methodology are highlighted.

3.1 A case for 'space'

Spaces are frequently transformed and invested with a range of shifting values or meanings as everyone has a particular sense of the spaces they occupy during the processes of everyday living. Discussions of the transformation of 'space', through human engagement, to 'place' are innumerable (see Basso 1996; Bourdieu 1990; Feld & Basso 1996; Giddens 1984; Gregory & Urry 1985 to name but a few). Similarly, many discussions are concerned with the meanings associated with the creation and transformation of the built environment – especially houses and other communal buildings such as churches (e.g. Graves 2000).

Although these discussions and case studies are varied in their focus and application, certain underlying principles remain identifiable. Meaningful space is lived and experienced through social actions and events (Glassie 2000: 21).

Consequently, space is a symbolic medium - enabling and transferring ideologies regarding social action. Space is, in effect, social practice (Parker-Pearson & Richards 1994b: 5). Space is fundamental to the negotiation of social relations, both as an expression of human relationships *and* as an active element directly involved in the reproduction and transformation of human relationships over time. The creation and organisation of space is not merely a reflection of dynamic social discourse but is also a factor in its constitution and reproduction.

3.1.1 Structuration theory

Giddens' (1984) theory of structuration is often used as starting point for discussions concerning archaeological approaches to space and social identity. At the centre of structuration theory is the notion that all social structures have a reciprocal relationship with human action, embodied within the routines of cultural traditions (Giddens 1984: 25-28). Within structuration theory, social structures are the overarching rules or frameworks that in general, society abides to, whilst agents or individuals, as the generators of human action, are the members of society who can conform to, or constantly modify and reconstitute, structure.

In nineteenth and early twentieth-century discussions of society, the influence of structures (*object*) predominated over agents (*subject*; the individual). Within structuration theory however, this relationship is seen as reflexive. Structure and agent both inform and respond to one another. This is what Giddens (1984: 25) terms the 'duality of structure'. When considering the transformation of spatiotemporal relations within a community therefore, the spatial manifestations of structure, the human agent, and the cultural traditions of space all play a significant role. In this way, the theory of structuration understands society as a complex framework, formed through recurrent practices adopted by individuals, but which are at the same time constituted *by* 'society'.

3.1.2 Space and the duality of structure

Space, as an active arena of social discourse and adaptive involvement, provides an excellent medium through which to investigate the suggested relationship between structure and agent. Spatial analyses, operating at various scales, have been central to many investigations which sought to examine this relationship in the past; through, for example, studies of the ancient landscape (e.g. Barrett 1994; Thomas 1996) or architectural forms (e.g. Bailey 1999; Kent 1990b; Parker-Pearson & Richards 1994a). As an active arena of social discourse, the spatiotemporal relations of a community are readily recognised as a key element within the reproduction and transformation of cultural values, social identities and community organisation:

‘Spatial structure is now seen not merely as arena in which social life unfolds, but rather as a medium through which social relations are produced and reproduced’

(Gregory and Urry 1985: 3).

As constructed cultural spaces, buildings and enclosures present defined contexts within which human actions, movement and relationships are controlled, restricted or dictated. The creation of physical boundaries within and around the home for example can relate to issues of defence, territory, shelter, and/or containment, but they also control access within and between areas by restricting or channelling movement, vision or sound, thus dictating relationships of power, inclusion and segregation (Parker-Pearson & Richards 1994b: 24). Styles of building, the incorporation of different building techniques and the engendering of social spaces within a building similarly relate to themes of inclusion and segregation; household and individual identity and relationships of power and status (e.g. Englestad 1991; Horton 1994; Parker-Pearson & Richards 1994a; Price 1999).

Continuities and changes in the manner, organisation and function of space provide useful indications of the constant and reflexive discourse between structure, agent and cultural tradition. It is the balance of these three elements in the discourses of prehistoric communities that has been the focus of much of the more recent debate concerning agency and the scale of social organisation and change in prehistory (a brief summary of which has been included below). The combination of factors in the form, layout and use of domestic structures and larger settlements from the past, can thus be used to interpret the relationships between agent(s) and structure at varying scales; from the level of the household or settlement, through to the wider community or 'society'.

In archaeology, the examination of the duality of structure through an analysis of space can help elucidate social relations that may not be formally documented or consciously enacted. The actions of agents (either in accordance with or against structure) do not need to be knowing, or socially ascribed; they can be inadvertent and subconscious, deriving purely from the routine habits of the everyday. This highlights a distinction between active and meaningful social discourse, and unintended, but still meaningful, non-discursive social action¹ (Gosden 1994: 101-126). Active and non-discursive social action inevitably operate in tandem, but have sometimes been approached quite separately within the interpretation of the archaeological record.

3.2 Space-time

Cultural traditions are effectively the sum of perceived social practices over time, and as such, the perception and recognition of time has a key role in the analyses

¹ The non-discursive reproduction of structure is well illustrated by the theory of language. Language has form and structure; but this is not visible and it is only 'present' as far as it actually forms part of what individuals do in their day to day use of it (Giddens and Pierson 1998). Similarly the human use of space can be seen as a language which varies temporally and geographically, and with reference to the cultural context of its use. As with language, processes of structuration operate within a spatial medium and are used in the reproduction and transformation of social systems and social change.

of spatiotemporal relations of past communities. In accordance, the role of time within the analyses of space has received continued attention over recent years, albeit in quite different ways.

Space-time is a term used when discussing space in relation to all four spatial dimensions: three-dimensional 'space' and 'time' (Thompson 1989: 61-62; Urry 1985: 22-24). When investigating spatiotemporal relations consideration *must* be given to the temporal context of social action, because the ways in which individuals and communities situate themselves in relation to the past, present and future exist as direct components of spatial dynamics at a three-dimensional scale. Time is intrinsic to any human experience and enables actions and experiences to be situated and understood (Gosden 1994: 101). All actions and events that take place within three-dimensional space and that result in the control and transformation of spatiotemporal relationships, are enacted and encountered within some chronological framework and understanding of time (Soja 1985: 90-94).

Previously, it has been argued that, as constituents of social reproduction, relations of space took precedence over relations of time in their importance and effect, with space, rather than encountered time, being the significant dimension structuring personal experience (Urry 1985: 29-30). However, this fails to acknowledge the fact that space is temporally constituted. Intrinsic to the experience of three-dimensional space is an acknowledgement of its inherent temporal relations. Spatial moments, the 'there and then', all have an arrival, duration and future. As such, temporal relations are inextricable from spatiotemporal relations in the structuring of social experience. This is what Pred (1981: 10) means by the 'intimate, intricate interconnectedness of different biographics that is an essential part of the everyday process of social reproduction'.

Within its original format, structuration theory appears closed to the proposition that structure can recognise time-space as inextricably related entities. This is because within the theory of structuration, structure was initially said to act outside of any boundaries of time and space, marked by an 'absence of the subject' (Giddens 1984: 25). What is crucial here however, is the concession that space-time and structure only coincide with the involvement of the agent. As the archaeological record is essentially the result of human intervention within a landscape, any identifiable structuration processes must therefore be operational within space-time; marked within the 'memory traces' given material expression through the archaeological record. Structure gains space-time through its relationship with the agent; this is in effect, the duality of structure in operation (see Gell 1992: 190-205; Gosden 1994: 191-192). The immediacy of space-time; physically and conceptually also makes it a much more subtle and responsive reflector of the agent, especially when compared to other aspects of material culture, the use which may be socially, technologically or temporally restrictive for immediate absorption and/or adaptation by an agent.

Time is thus an integral element within spatiotemporal relations and as such, a consideration of time must be included within any analyses of spatiotemporal relations. A holistic approach toward space-time as directly related constituents will form the foundation of the methodology advocated below.

3.3 A note on agency

The discussion above provides a very basic overview of the theoretical approaches toward the relationship between space and time, upon which more recent archaeological applications can now be discussed. Before looking at these however it is useful to briefly examine the changing attitudes toward the description and identification of the 'agent' – particularly when concerned with the investigation of 'structure', 'time' and 'space'.

Rather than having fixed forms or notions of 'structure' and 'agent', structuration theory argues for an emphasis upon the collective flow of people's actions: the 'regularities of social reproduction' which make up the process of structuration (Giddens 1984: 16-28, see Fig. 3.0). However, in recent years, structurationist approaches have been specifically criticised for leaving little room for the transformative action of the agent, despite the emphasis upon the 'duality of structure' (see Hodder 2001b). In response, the last fifteen years has seen explicit attempts by archaeologists to both define the 'agent' and identify the mechanics via which agents are visible within the archaeological record (e.g. Barrett 2000; Barrett 2001a; Dobres & Robb 2000; Hill 1997; Hodder 2000; Jones 1997; Lavolette 2003; Meskell 1999; Thomas 1996, 2001; Tilley 1994).

With particular reference to studies of space-time, phenomenological approaches have placed the agent as central to the control of time and the speed and rhythm in which it was experienced. The priority and emphasis within such discussions lay with the actions of individual agents to shape the world they experience, and their perception of time was crucial to this extent (e.g. Husserl 1970). This view has since been criticised for being overly idealistic, for giving *sole* responsibility to acts of perception for shaping the world, and for abstracting these acts from the influence of broader social structures (Gosden 1994: 106). In the consideration of space-time however, the differential perception of these values (an issue highlighted within the earlier phenomenological approaches to the topic), have since been developed and explored as important factors in the reproduction and transformation of society (e.g. Bradley 2002; Gosden & Lock 1998; Lucas 2005 see discussion below).

Finally, a select number of studies in recent years have chosen to emphasise the situation of the agent in context; effectively within the duality of structure. Within these, the actions of agents are discussed *in relation* to the structures which are used and enable them to act; material resources, technological knowledge, or

control over exchange networks for example (e.g. Barrett 1994; Joyce 2000). The origins of these perspectives can be traced to Bourdieu (1990) and the concept of *habitus*, within which the presence of structure is acknowledged within and as part of the subtleties of social practice. Social practice, Bourdieu argues, is not consciously mastered but rather is built up from experience. In doing so however, the difficulty of continually sustaining the narrative of the individual is realised; *habitus* produces practices which are unpredictable individually, but limited in their scope. What has been picked up on by archaeologists, within the concept of *habitus*, is the notion that actions and perceptions are *unconsciously* inspired within the individual body and the social body in a way which creates consistency, although not sameness, in life (Gosden 1994: 117).

This notion has been taken and modified by Barrett, in his advocacy of 'pluralistic agency' (Barrett 2000). Drawing upon both Bourdieu, and Heidegger's (1962) 'being and time', Barrett suggests that 'agency' should not focus upon the study of the individual *per se*, but instead acknowledges that all actions are constituted within time and space and are thus engaged within a broader cultural context of meanings and actions. Crucially, this places the emphasis upon the individual experience of the agent, over structure. Agents are socially embedded; they act as part of 'being-in-the-world' (Barrett 2000: 66). As such, they identify to themselves and others through self sustaining actions which reference the past and carry it into future, and which draw upon distant places within the familiarities of immediate actions and events.

By adopting a pluralistic approach to the study of agency, criticism that agency opposes or refutes the possibility or worth of 'general trends' or 'grand narratives', can be classed as an adequate observation of an *inadequate* concept of agency (Barrett 2000: 62). By reflecting the inherent experience of the agent at multiple levels within broader systems and structures however, a pluralistic notion of agency offers the potential to recognise and accept opposing rates of change and variation operating between differing scales of social grouping. This

is very important as the recursive relationships between structure and agent do not necessarily flow smoothly, constantly or at the same pace; geographically, temporally or between different scales of social grouping. From the conclusions drawn via the methodology below, a pluralistic understanding of agency will be demonstrated within the evidence for the spatiotemporal relations of the Later Iron Age and early Roman communities of Cornwall.

3.4 Combining space-time and agent: spatial analyses of past communities

A clear example of the geographical approach to space-time can be seen in the model for space-time and human action proposed by Hägerstrand (1967). Hägerstrand's model depicts how any number of social events might rationally exist through space and time (see Fig. 3.1) based upon the effects of a series of logical determinants (or constraints) which routinise daily existence (e.g. that no individual can be in more than one place at one time, or move instantaneously from one place to another for example). The simplicity of Hägerstrand's model for space-time highlights the reflexive nature of space-time and social action surprisingly well (Gell 1992: 191); that all action exists within and is framed by, a structure of space-time. This model has provided a basis for a number of attempts to model the use and organisation of space in the past (see below).

At the same time, this 'stripped down' approach to space-time also clearly illustrates the limitations of abstracting space and time from the cultural traditions and experience of the agent, of other actions and agents, and indeed, the qualitative effects of space-time upon social action. Whilst such modelling enables the exploration of the patterning of social events *through* space and time, they fail to reflect the events that are the result *of* space and time. Time and space are interrelated but *monolithic* concepts in this 'stripped down' approach to space-time.

3.4.1 Space syntax

Employing a similar approach to space-time as Hägerstrand, the late 1970s and early 1980s saw the development of 'space syntax', initially devised by Hillier and Hanson (1978, 1984). 'Syntax' is the term given to the systematic production of patterns; 'space syntax' being the investigation of the underlying patterns and structures of the systems of space, created via the built environment (Hillier 1998).

In its original format, space syntax proposed that complex buildings, settlements and cities from both the past and present could be categorised in terms of eight major 'types' of spatial pattern, all of which were structurally interrelated (Hillier & Hanson 1984). Although the notion of space syntax has since been refined and extrapolated in very many different directions (see www.spacesyntax.com for the latest commercial developments of this theory), the foundations of the model – that the transformation of space follows systemic and observable patterns as a result of the effects of overarching social structures – remains the same. On this basis Hillier claims that, given the plan of any ancient city recently uncovered, he can predict the way in which it is most likely to have looked today (Hillier 2005, pers. comm.).

Clearly, this analytical model is strongly focused upon the spatial consequences of the effects of structure over agent. Although agents inhabit spaces, and are the undertakers of spatial modification, from a syntactic viewpoint they are merely reacting to influence of structure, expressed through space-time. Space syntax has a strong mathematical basis, derived from the supposition that, as in nature, there is an inherent mathematical order to the way in which space is culturally structured. This initial premise must be accepted if the application is to be considered of any value; 'that man creates more mathematically than he knows' (Hillier *et al* 1978: 344).

As mathematicians, the immediate concern of the authors was of theoretical criticism by others within their discipline. Issues with the assumptions inherent in modelling complex past societies from the partial remains of the archaeological record were not deemed problematic (Hillier *et al* 1978: 345). Hillier and Hanson's belief in their mathematical modelling drew much scepticism amongst the archaeological world at the time, with the suggestion that archaeologists were being 'taken for a ride...', that 'the universe...is not as simple as these authors try to suggest...', and that ultimately, space syntax as an application is 'unacceptably naïve' (Leach 1978: 386).

3.4.2 Access analyses and configurational theory

Nonetheless, aspects of space syntax have still been readily adopted by archaeologists, searching to interpret the link between spatial order and social structure (e.g. Foster 1989; Scott 1990). Access analysis is a feature of space syntax most frequently applied by archaeologists and is the most easily adaptable form of syntactic analysis applicable to the excavated record. Access analysis has informed the development of the 'segmentation formats' used within this thesis as part of the analysis of the spatiotemporal relations within courtyard houses (see 3.13 below).

Access analysis provides a technique to log the arrangement and permeability of different, defined, spaces, on the basis of their interconnectedness (see Fig. 3.2). Differences in the nature and permeability of space between different households or 'communities' are then compared, and related to suggested differences in the social relations and cultural values of a community.

In Foster's (1989) application of access analysis to Iron Age brochs in Orkney, distinct inequalities in the permeability of space evident between a broch and its

outbuilding occupants, and, to a greater degree between the broch settlement and the settlements outside, were identified. This in turn led Foster to suggest that in most instances, brochs represented an elite family residence, situated at the centre of planned nucleated villages, consisting of clients who paid tribute to the elite of the broch in return for protection or patronage. The non-nucleated settlements outside these broch sites were also regarded as dependent on the resident elite.

However, within this example a number of pre-determined assumptions relating to the application of access analysis need to be questioned. Foster's application requires a heavy degree of interpretation of the pre-existing remains (of the position of kerbs and gaps and their possible intention (or not) as doorways for example) - but ignores the extent to which these sites may have been (heavily) modified in the *c.* 2000 years since their construction and later abandonment. Beyond the recognition of its existence, the significance and permeability of the upper floor or gallery of a broch is not investigated at all.

In addition, the inclusion of interpretations regarding room function belies a degree of pre-existing assumption regarding the nature of social organisation within broch communities: for example, the inclusion of 'guard' rooms within the access maps (Foster 1989: 47). In all, one has to question whether it is access analysis that has led to an interpretation of hierarchical broch societies, or whether traditional notions of 'Celtic' societies have predestined the interpretation of the results access analysis has produced.

To this extent more general deconstructions of 'space syntax' and indeed, of access analysis, have criticised its ignorance of the multiplicity of symbolic meaning within spatiotemporal relations. This criticism derives from more general theoretical censure of spatial analyses, on the basis that they extract the analyses of spatial patterns and symbols from their historical, cultural and ideological contexts (Parker-Pearson & Richards 1994b: 30 and see the discussion of socio-semiotics below). Furthermore, the addition of furniture,

screens and other material trappings, now absent from the archaeological record, could have altered the degree to which space could be accessed - physically, visually and audibly.

In *Space is the Machine* (1996), Hillier proposed a new, configurational theory of architecture, which argues that architectural design and form are fundamentally configurational in that their importance and meaning derives from seeing their relationship as a whole, rather than in abstract parts. Although the potential for small-scale variation and the recognition of ideology initially appears stronger within this theoretical model however, within Hillier's exposition of these configurational relations, the role of collective agents to elaborate physical form is only ever seen to travel in accordance with those patterns which are socially sanctioned (see the arrows in red on Fig. 3.3).

In the discussion of architectural segmentation, another case study is of direct interest. Kent's (1990a) largely theoretical study of segregation within domestic space asserts that as the socio-political complexity of society increases so does the complexity of organised social space and the built environment; particularly in relation to increasing partition and segmentation. Kent uses modern cultural case studies to illustrate this relationship, although it is acknowledged that some examples can be shown to deviate from this cultural norm. The role of socio-political influence as the dominant factor affecting the complexity of the built environment is favoured over ecological and resource-based factors, in line with Rapoport's (1976) assertion that ecological issues act as modifying controls upon socio-cultural factors which operate as the primary influence upon built form. Kent argues a direct relationship between the increasing division of architectural space and the increasing complexity of sociopolitical organisation (1990a: 128).

In the methodology advanced in this thesis, the classification of the segmentation displayed in courtyard house structures will be undertaken, with each structure being given a 'segmentation format'. This classificatory system derives in part

from access analysis and draws inspiration from Kent's study of spatial division. However, unlike either of these models, the examination below will not pre-empt any interpretation of social complexity from the number of rooms or their permeability. Rather, emphasis will be given to room shape and size, orientation and combination on a structure by structure basis, building to a comparative analysis between other courtyard houses and non courtyard house settlement.

3.4.3 Spatial analyses in the 1990s

More recent spatial analyses have moved away from attempts to identify, predict and recreate social order through mathematical modelling and have instead tried to focus on the variation and cohesion expressed through singular aspects of the built and un-built space of a community (e.g. Gron 1991; Gron *et al* 1991; Lawrence & Low 1990; Scott 1990; Scott 1993). These studies can be seen to have benefited from theoretical developments concerning semiotics, the science of recognised systems of signs, which has proved to be more sensitive to elements of cultural communication than, for example, the syntactic approach outlined above (Eco 1980: 11).

In its initial format semiotics was criticised for abstracting symbols, and thus meaning, from the social contexts within which they were produced and developed. This has led to the development of socio-semiotics, a process which examines how signs and symbols capture articulated systems of meaning in their material settings (e.g. Laviolette 1999). Socio-semiotics crucially recognises human actions as *culturally adaptive* phenomena, permitting a *contextual* approach to the relationship between human agency and spatial and structural communication. Cultural objects are regarded as being situated within particular historical contexts as well as being elements within systems of signification. Recognition is given to the possibility that objects and structures may be invested with multiple meanings or be interpreted in differing ways, depending on the

social context and systems of signification they are embedded within. In suggesting so, socio-semiotics can be regarded to have laid the foundations of biographic approaches toward the interpretation of objects, monuments and events (see below).

An early example of a spatial analysis with a greater awareness of a socio-semiotic approach to architecture is Chapman's (1991) examination of the early Balkan village. In this, Chapman draws upon a number of analytical variables including building dimensions, ratios of built to un-built space (BUB) and minimum inter-building distances (MIBD). These variables are used as indicators of spatial cohesion and variation between differing types of site in the region, and are examined as reflexive responses to socio-political and environmental conditions. Settlements at which building size clusters around a median value are suggested to reflect a strong cultural cohesion, whilst ratios of built to un-built space are suggested to affect the nature and extent of activity both within and beyond the household and settlement, thus highlighting differences within social and cultural economy.

Although limited, Chapman's examination does show a certain degree of contextualisation. Tell sites are distinguished from flat settlements by their lower mean MIBD and their low dimensional variability. It is argued that the occupants of Tell sites display more active expressions of social cohesion and continuity over time, and that the role of ancestors was more important to the social structure of these settlements (Chapman 1991: 92). However, whilst the significance of the perception of time to the use and organisation of space is mentioned by Chapman, it is not explored in tandem within his analysis of spatiotemporal relations. Time is not seen as integral to the spatial decisions and transformations on site, but is rather 'tagged on' at the end, as a form of hypothetical reasoning. As such, there is no explanation offered as to why space and time are interrelated, or what specific notions of time and of 'the past' are active within the reproduction of spatiotemporal relations on Tell sites.

3.5 Phenomenological approaches to spatiotemporal relations

Perhaps the most fundamental challenge toward Hägerstrand, space syntax and the other, more overtly ‘space-based’ approached to space-time, is this latter point – that they miss the true mutuality within space-time; that space and time are inherently interconnected and that they need to be studied in tandem – that people shape the world with reference to time and space as the world shapes them (Gosden 1994: 80).

One aspect of this deeper inter-relatedness of space and time is the effects of the perception of time and of the past, upon spatiotemporal relationships and identity (see Shanks 2001: 299-300). Until fairly recently, this issue was still absent from academic debate. Gell (1992: 314), by his own admission for example, notes that he says little in his book *The Anthropology of Time* with regard to history, traditions and memories (essentially the significance of differential perceptions of time), when discussing the constitution of social relationships. Over the last decade however, and specifically within archaeology, there have been new attempts to bridge this gap. Drawing upon the examination of space as place, and phenomenological approaches to the inherited landscape and material culture, certain studies of prehistory have purposefully adopted a more dynamic and contextual notion of ‘time’ within their interpretation of the archaeological record (e.g. Bevan 1997; Bradley 2001, 2002; Brück & Goodman 1999; Gosden 1994; Gosden & Lock 1998; Pollard 1999; Thomas 2001).

In an attempt to move from familiar passive forms of space and time, to active ones, the contextual experience of space-time had to be recognised:

“If time and space are constituted by people, we must ask how time is timed and space spaced...”

(Gosden 1994: 86).

The foundations of this concern can be traced to the work of Durkheim (1965) and explicitly to his proposition that the rhythms of social life provide the initial basis for the categorisation of time (1965: 488). Thus, as with the experiencing of material culture and the action of the individual, the experience of time is contextual.

In early archaeological examinations of the experience and significance of space-time, focus centres upon the scale of social reproduction rather than the scale of the individual agent, and toward the active discourses of space-time, as opposed to the habitual and sub-conscious discourses of daily routine. The pioneering work on space-time by Barrett, Bradley and Green (1991) with reference to Cranborne Chase, evolved theories of space-time at a broader 'community' scale, by looking at the active discourses invested and reproduced through monuments and locales within the landscape. The emphasis of this study lay in the social awareness of time and space reproduced through the frequency, nature and use of monuments and locales within the landscape (Barrett *et al* 1991: 6-7).

Several aspects of this study are of particular note. The first is their recognition that all social action is culturally meaningful; and that this meaning was maintained through a combination of practical knowledge and discursive knowledge. The former is suggested to have been generated through a specific understanding of the social conditions of experience, and the latter summarised and formalised this social 'understanding' of experience through ritual events (Barrett *et al* 1991: 7). This theoretical framework for social action provided a scale of investigation – primarily at the level of the landscape – and a specific methodological agenda, that i) considered the frequency with which certain actions were repeated or certain locales occupied, and ii) recognised that certain locales had different roles, separated in time, in the reproduction of social conditions.

Barrett, Bradley and Green's (1991) examination of Cranborne Chase offers one of the earliest archaeological applications of a space-time analysis that actually approaches space and time as equal and interrelated structuring principles of social discourse from the outset. There are also limitations to the study however. Of key significance is the nature of discourse under examination – that is the conscious or 'meaningful' discourses embedded in the landscape. This form of social discourse was identified as being largely tied up in the 'ritual' actions operating between groups at a fairly broad scale of society. This in turn defined the scale of landscape analysis. The initial concerns of these authors was thus not primarily with the specific experience of space-time at household level, but rather with changing patterns of expression and social reproduction within a 'landscape' and over a very long expanse of time.

3.6 Prehistoric histories

These issues have since been taken on by Gosden in particular (Gosden 1994; 1997; Gosden & Lock 1998), who focused upon the realisation of spatiotemporal relations at a lower level: with small-scale actions and activities involving material culture that were 'non-discursive', but still culturally meaningful, and still imbued with temporal meaning through the course of everyday life. The examination of non-discursive practices allowed for a conscious recognition of the generation of meaning in the past in relation to space-time, through the different ways in which habit and thought interacted in relation to the long-term histories of groups, and the differences behind the experience and transmission of social 'histories'.

Gosden and Lock (1998) were some of the first to attempt to articulate the significance of time within the non-discursive social reproduction of past communities at a local level, and to define the potential archaeological signatures for this. By examining the nature and context of repetitious actions involving

monumental structures and material culture, Gosden and Lock were able to distinguish between two forms of temporal 'understanding' within prehistoric communities: their 'Prehistoric Histories'. Within this research, the investigation of all social action as culturally meaningful was aided by adopting a biographical approach to the contextual study of material culture on site (e.g. Gosden 1997; Gosden & Marshal 1999).

The methodology for examining 'prehistoric histories' relies upon the identification of 'ritualized' (Bell 1992) processes within the archaeological record, discernible through formalised and repeated sets of actions. Two ways of conceiving the past are distinguished and associated with specific forms of re-use and repetitious activity respectively. *Genealogical history* describes the process where by an understanding and veneration of the past is created through links to known ancestors, or a direct lineage. This form of historical veneration is expected to manifest itself through the repeated or repetitious use and maintenance of landscape monuments and features with 'known antecedents, to which a group (or parts of it) return on a regular basis to carry out activities of a prescribed type' (Gosden and Lock 1998: 4). Alternatively, *mythical history* describes the process via which an understanding and veneration of the past is created through links to a less well known, or tenuous version of the past. This form of historical association is likely, it is suggested, to be discernable through actions at ancient features in the landscape, 'given new values within the contemporary setting' (Gosden and Lock 1998: 4).

The identification of 'new values' can presumably be observed through repetitious acts of a distinctly later date, or of greatly differing nature to the original acts or events relating to the monument. The difficulty, from a methodological perspective, is identifying the point at which references to a genealogical understanding of history give way to mythical understanding of history. This distinction relies heavily upon the duration of time between acts of ritualization at a specific locale. In terms of the nature of repetitious acts, any

interpretation of their contemporary meaning will always be problematic and inherently unreliable, making the actual interpretation of ritual action a difficult mechanism via which to elucidate the form of 'history' being referenced.

In interpreting the role and significance of the past through the context of social actions, evident at a variety of scales, the development and application of 'prehistoric histories' employs the notion of 'pluralistic agency' (Barrett 2000). It is perhaps no surprise that the differential perception of time and memory in prehistory have become key lines of investigation for both Barrett and Bradley in recent years (Barrett 1999; Bradley 2001; 2002). What is worth final note, however, is that all of these more recent works operate, at least in part, at a smaller scale of analysis than that employed in the earlier examination of landscape space and time at Cranborne Chase (Barrett *et al* 1991).

3.7 'The past in Prehistory': a current concern

A combination of the theoretical and practical considerations discussed above has resulted in a flood of recent, explicit examinations of the role of the past in the past, although not all of these studies are successful in marrying the analysis of time and space in tandem. The combination of physical and cultural elements inherited from the past, the intentions and desires of the present, and the potential requirements and possibilities in the future have been highlighted as tensions familiar to all communities, past and present (Gosden & Lock 1998: 4). This reinforces the suggestion that a complex consciousness of the past was fundamental to the orientation of the present for all prehistoric societies (Bradley 2002: 13-14).

Close associations to the architectural landscape and material culture of antiquity have been identified as one way in which prehistoric groups maintained a

relationship with the past and, perhaps, developed beliefs regarding their origins (e.g. Barrett 1999; Bradley 2002; Hingley 1996; 1999). Oral traditions would have been used to help interpret and situate communities within their inherited landscape (e.g. Brück & Goodman 1999: 8; Nowakowski 2001). These traditions would have drawn upon specific interpretations of the past; in order to interpret the material culture of antiquity some form of temporal narratives would have had to have been in place.

Continuities in material culture, buildings and landscape features, for example, would have provided a framework for historical interpretation just as much as variations in style and form (Bradley 2002: 11). Neither change, nor continuity are passive occurrences over time. The decision to conform to 'old' constructional and stylistic techniques, or to break away from traditional methods and styles, or both, reflect specific sets of relations developed between communities of the present and their vision of the past, present and future. Similarly, engagement within specific ceremonies, participation within events which use or relate to physical remnants from antiquity, and the construction and transformation of monumental architecture, may have all been involved in processes of remembering and venerating, or equally disassociating and disconnecting from, a perceived past, lineage, or origin. Such active participation would have helped cement oral traditions concerning the nature of past societies and a prehistoric community's relationship to them. Over time, many ceremonial practices may have become instinctive rather than intellectually enacted, and developments with material culture and landscape architecture used to confirm or deny prescribed visions of the world, inherited.

In developing oral traditions concerning the past, a vital and very powerful building block was generated upon which the foundations of a community could be based. Control of the past, and the way in which the past was understood was a very powerful tool of social control within prehistory. By controlling the perception of the past, one was able to dominate a community's 'world view'.

The notion of ‘history’ at work within society, it is argued, has direct implications for its organization and control of continuity and change (Gosden & Lock 1998: 2). Notions of lineage and ancestry, and the social rules and ceremonies associated with these concepts, could be used to structure and organise the relations of power within a community, and provide a framework of identities to which individuals and small groups could choose to prescribe, to differing degrees. The establishment of narratives concerning the past and the control of these narratives was thus incredibly important for the control of the present.

3.8 Cultural biographies

The discussion above has suggested that references to genealogical and mythical understandings of the past, during prehistory, are discernable within the archaeological record through formalised and repeated sets of actions. In order to undertake such an examination of social action over time, at the level of individual structures, enclosures and settlements, as well as at a broader landscape level, a biographical approach will be taken to the archaeological record.

Cultural biographies focus upon the relationship between people and the ‘things’ around them: artifacts, building, monuments and buildings for example (see Gosden & Marshal 1999 for a review, and other articles in *World Archaeology* 30 vol.1). In its production, form, style and decoration, material culture is encoded with a variety of different meanings and values. Over time this material becomes invested with multiple meanings and values, each specific to the cultural context within which they are situated, thus creating an item’s ‘cultural biography’. Crucially, the relationship between an individual or community and the biography of a ‘thing’ is also a reflexive one: humans invest objects, monuments, places and landscape with meanings and values over time and vice versa. This is particularly important when considering individual and community identity.

Although studies of artefact (Appadurai 1986; Gosden & Marshal 1999; Kopytoff 1986) and landscape biographies (Bender 1993; Evans 1985; Gosden 1997) have been practiced for several years, studies of 'places', including 'settlements', as cultural artefacts in their own right, are only just beginning to receive attention (see Barrett 2001b; Chapman 1998; Gerritsen 1998; Hingley forthcoming). 'Settlements' do exist in themselves, however, as mediums of expression that reflect individual spatial and material constructs that are experienced both in isolation from and as part of the broader landscape. The study of settlement biography allows investigation of the meanings and values that were invested in and reproduced throughout this sphere by societies past and present. The focus on the meanings invested within material over time as part of a biographical approach makes it a particularly suitable methodology for investigating 'prehistoric histories'. By focusing upon structural, settlement and landscape biographies, patterns and adaptations in the repetitious nature of actions can be identified and considered in relation to the potential referencing of genealogical and/or mythical histories.

3.9 Methodological analyses

Spatiotemporal relations will be examined in tandem through analyses of the nature of the built environment, construction and deposition within and between structures and settlements. This will be achieved by adopting a biographical approach to the interpretation of settlement and associated material culture. This will enable an analysis of spatiotemporal transformations and an assessment of the nature and perception of time involved within these transformations. Repetitions in construction and deposition will be identified and, where sustainable, will be applied to the distinctions of genealogical or mythical histories, as outlined by Gosden and Lock (1998). By adopting this biographical approach to the nature and context of spatiotemporal relations, scales of

individual and household diversity will first be identifiable, prior to any generation of a broader 'social' narrative.

A number of calculations will enable the quantification and comparison of spatiotemporal relations within the Later Iron Age and early Roman communities of Cornwall, within the theoretical framework already outlined (Fig. 3.4). These spatial analyses include the calculation of internal and external structural areas, of percentages of built and unbuilt space within sites, the spatial patterning of structures, the degree of segmentation within structures, and structural orientation. Where possible, these analyses have also been considered in relation to the contexts, composition and location of deposits on sites.

3.10 The Data Set

The dataset used here comprises excavated sites (up to and including June 2005) with evidence for occupation and/or activity during the Earlier Iron Age, Later Iron Age and/or Romano-British period. A small number of unexcavated sites which have produced stray finds, likely to relate to construction and/or occupation periods, are also discussed. The number of excavated, usable sites (including courtyard house structures) spanning the three periods of study totals 77 (see Fig. 3.5). A list of these sites can be found within Appendix 1. The number of structures from these sites, for which details are known, totals 94.

A range of spatial analyses have been conducted upon all or part of this dataset. The nature and extent of data from each site varies and as such, for certain analyses such as the 'built percentage', only a proportion of sites offer the right combination and quality of information required. In addition, differences in the quality and extent of recorded evidence have resulted in a combination of different techniques of measurement and calculation having to be applied to certain sites, in order to enable greater comparability within the dataset. Examples

of calculations generated for each site is displayed in Appendix 2. Databases have been constructed using Microsoft Access 2002 and Microsoft Excel 2002.

Where appropriate, additional sites of uncertain date have been incorporated within the discussion of spatial analyses², generated from excavated sites. The date of these unexcavated sites remains speculative, derived largely from comparable settlement types which have been dated through excavation. Several unexcavated sites do contain extant structural remains however, from which some spatial information can be retrieved. As such, these sites can provide useful (although limited) comparisons for interpretation.

As discussed (3.14.6), the analyses of on site deposits will be integrated within the discussion of spatial analyses in the following two chapters, and within Chapter 6, which examines the sequences of deposition and construction across all site types in closer detail. Limited discussion will be offered in terms of spatial function derived from the depositional placement of material, due to the uncertain effects of post-depositional and abandonment processes already highlighted (see 3.14.6). Instead, the contextual details of specific deposits will be evaluated and related where possible to sequences of events and actions on site.

3.11 Structural areas (internal area and total area)

Values for structural area will provide the basis for a number of subsequent spatial analyses. Where possible, two areas have been calculated for each structure within the data set. The 'internal area' relates to the entire internal floor space of the structure (including porch where evident). The 'total area' of a structure comprises the total floor area of the building, including outer wall.

² it is important to reiterate that only sites, dated through excavation, will actually be considered within the spatial analyses themselves.

Only a small number of excavated sites actually have scale plans of complete structures. For the remainder of sites, structural dimensions are provided within excavation reports and/or the SMR. For the vast majority of extant structures (mostly courtyard houses), the only data available were structural dimensions within the SMR, produced from site surveys from the last *c.* 100 years. These structural remains are now covered in dense gorse, making their recognition or measurement impossible. It is also not possible to remove the gorse without destabilising the existing remains. The only opportunity for re-measuring extant structures is if a small fire has effectively removed the gorse from the structure. Thus, it was impossible for the current author to undertake any re-measurement of extant courtyard houses and non-courtyard houses for this thesis. As a result, the data for this thesis comprises of the measurements provided within excavated reports and the SMR and the few plans of excavated structures that exist.

A methodology was established to calculate and then compare structural areas for all excavated and/or extant sites. This methodology has since been discussed with the Dr. Abeyasekera, principal statistician at the Statistics Advisory Board, University of Reading. The key problem in working with the Cornish dataset was the lack of scale plans available for complete structures (only 10 plans of non-courtyard house structures and 7 of courtyard house structures). A series of formulae were thus developed to calculate internal and total area, suitable for all structures within the dataset. The creation of formulae enabled a more uniform approach to be taken toward the calculation of structural area. By applying these formulae to all structures, any degree of error was applied to all structures, making the dataset more comparable.

Where a single diameter was given and the structure described or drawn as circular, the area was calculated using the formula *area* = πr^2 . Where a length and width for a structure was given, and described or drawn as sub-rectilinear or rectilinear, the formula *area* = *length x width* was used. In cases where the structure was described or drawn as sub-circular or oval, or where no evidence for

the shape of structure was offered, the formula **area = (length x width) x 0.8** was used (http://www.spectrumanalytic.com/support/library/ff/area_calculations.htm).

In order to test the accuracy of these formulae in calculating the internal and total areas of structures, these values were compared to those calculated using the scale plans available for complete non-courtyard house structures (see Fig. 3.6). A regression analysis was then applied to the data, to compare the correlation between the values generated from plans and the values generated by the formulae for the same structure. By doing so, it is possible to evaluate the reliability of one set of values (i.e. those areas generated by formulae) in predicting the other set of values (i.e. areas calculated from plans). In the case of a perfect correlation, the values would all lie on a straight line ($y=mx + c$) (Rowntree 1991: 178). However, where values do not have 100 percent correlation, a line of best fit is taken. The more horizontal the line, the less accurate the correlation between the two values (*ibid.*). A computer program (SSC-Stat) was used to evaluate the correlation between the values calculated for total area (Fig 3.7). The percentage error between the two values generated for each structure can also be calculated (Fig. 3.8).

The percentage error between the values for total area do vary, but the line of best fit within regression analysis still shows a fair degree of correlation between the two methods used to calculate area. Because the sample of structures with scale plans is small, further statistical testing (i.e. confidence tests) would only serve to produce a false sense of confidence in the data (Abeyasekera_pers. comm.). The use of formulae in the spatial analyses of the Cornish data is unavoidable, because of the lack of structural plans available and the need to make the dataset comparable. These formulae also provide the most accountable method of calculating structural area, given the human bias involved in the measurement of structures recorded within excavation reports and the SMR. The use of the formulae above is also arguably more reliable than taking measuring from the scale drawings. In the plan of structures at Bodrifty for example, the relative size

of structures on the plan does not appear to adhere to their relative dimensions, given within the excavation report (Fig. 3.9), throwing some doubt on to the accuracy of the scale plan. Having recognised the extent of correlation between these two methods of calculation, and the limitations of the data, the following spatial analyses will be attempted, using the formulae outlined above.

3.12 Percentages of built space

The ratio of built to un-built space is generated for enclosed sites by abstracting the area of the enclosure from the combined total area(s) of the structure(s). The total area of oval, circular or rectangular enclosures is determined using the formulae outlined for structural areas, within measurements taken from the internal perimeters of the enclosure boundary. Where the total excavation of a site has been undertaken, the ratio of built to un-built space is based upon the total site area. In cases where only partial excavation has been undertaken, ratios of built to un-built space are calculated for each excavation trench, and the sum value averaged and extrapolated to the rest of the enclosure.

As a measure of built percentage, this process has obvious disadvantages. The mean average, for example, relies upon the built percentage discovered within the excavated trenches being representative of the site as a whole. As is becoming clear, Iron Age enclosures are particularly varied in the extent and location of built space within their interiors (Haselgrove *et al* 2001: 10). In order to gain some insight into the distribution of archaeological features within Iron Age sites in Cornwall that have only been partially excavated, a program of geomagnetic survey was undertaken in May 2004 and 2005. This project was in part designed to evaluate the degree to which the density of structural occupation recovered through the partial excavation of certain sites was representative of the rest of the enclosure. The results of these surveys are included and interpreted within

Appendix 3 and have been integrated into the discussion where relevant, throughout the thesis.

3.13 View-sheds, access and orientation

View-shed analysis concentrates upon the angle and distance between the doorways of structures and the distance of other structures within immediate view. Particular consideration is given to the scope of un-obstructed sight achievable from each doorway. Access between and around structures within settlements and enclosures is also assessed for ease and directness. This analysis draws upon more rigid 'access analyses' used for segmented architecture (e.g. Blanton 1994; Hanson 1998; Hillier 1996). The ease of movement through a settlement and the depth of access achievable within a structure, are used to infer aspects of spatial privacy and publicity. For courtyard houses, detailed discussions of view sheds and access have been included within the Gazetteer (Appendix 4).

Consideration of structure orientation is also undertaken. The orientation of all doorways within the perimeter of a structure are noted and compared and the results assessed in relation to the continuing debate surrounding the presence, or not, of a unifying British Iron Age cosmology (see Giles & Parker-Pearson 1999; Oswald 1997; and Pope Forthcoming for the critique). In addition, and in association with the view-shed of structures, the orientation of structures within enclosures is considered in respect of notions of communal publicity and household privacy.

3.14 Segmentation

Kent (1990a) argues that as social differentiation and hierarchy within a community increases, so does the degree of segmentation within and between activity areas. This, she suggests, is often achieved via the use of partitioned architecture. In addition material culture is also argued to become more segmented, socially restricted and functionally discrete.

The use of segmentation within structures, through evidence for partitions or demarcated through the use of different floor surfaces and/or the location of features such as hearths and pits, is examined within Chapter 4. For courtyard houses, where segmentation is evident through the formal demarcation of walled rooms, a methodology comprising of a logical numerical sequence was derived by the author, to relate to the number and composition of different rooms within a courtyard house format. This methodology is outlined within Chapter 5.

3.15 Sequences in construction

Several recent studies of identity and social structure have benefited greatly from a close inspection of sequences and transitions in the nature and location of building construction (e.g. Gerritsen 2003). Within this thesis, scrutiny is taken toward the nature of constructional techniques within and between sites, to evidence for the maintenance and/or re-building of structures, and to continuities and/or changes to the location of these structures on site. Similarities and/or differences in the nature of materials used in the construction of buildings, temporally and geographically, are also considered. Any resulting sequences are related, where possible, to the conditions of 'mythical' and 'genealogical' histories, as outlined by Gosden and Lock (1998) and discussed above.

3.16 Sequences in deposition

Interpretation of the spatial distribution of artefacts and other cultural remains within structures and enclosures has, until relatively recently, remained fairly simplistic. Traditionally, the distributions of cultural items were frequently used to distinguish specific 'activity' areas and gendered divisions of space generated as a result (e.g. Clarke 1972b: 801-839, Hirst 1937: 45). It is perhaps more surprising to find similar divisions still apparent within more recent spatial analyses. Hingley's (1990) interpretation of spatial distinctions within Iron Age roundhouses for example places women within the same peripheral spaces of the roundhouse, with which he also associates dirt, darkness, rawness, death and fertility. Although inequalities of sex are documented ethnographically, the imposition of structuralist dualities in this way would indeed appear to have generated an extreme and 'somewhat disturbing' male perspective of prehistoric women (Pope 2003: 257).

Theoretical recognition of the fallacy of the 'Pompeii premise' (e.g. Schiffer 1985), and recent ethnoarchaeological studies (e.g. Cameron and Tomka 1993) highlighting a range of planned and highly organised 'abandonment' within the ethnographic and archaeological records, have combined more recently to guard us against simplistic interpretations regarding artefact positioning and the location of social action or spatial function. This realisation is heightened by more subtle interpretations of structured deposits in prehistory, which focus more closely upon the nature and context of assemblages within sites (e.g. Barber 2003: 109-179; Garrow *et al* forthcoming; Hill 1995b). Rather than searching for overarching schematic explanations for these deposits, site based narratives have begun to allude toward more subtle themes connecting the variations, inherently produced from sequences of social actions (particularly deposits) at a local scale.

Analyses of on site deposits within this thesis focus upon sequences in the nature and location of deposition and the composition of deposits and how these relate to

one another within and between sites. In doing so, patterns in the location, composition and context of deposits are examined and where possible, related to the conditions of 'mythical' or 'genealogical' histories, as outlined by Gosden and Lock (1998). The spatial patterning of cultural artefacts is also incorporated within a consideration of the spatial division and segmentation of structures, although any interpretations offered will be countered by a full recognition of the structured organisation, likely for such deposits.

4. Spatial Analyses: Non-Courtyard House Settlement

‘Survey of the existing data indeed demonstrates that no circular houses, especially those with interior post-rings of the classic prehistoric type, belong to the Roman period in Cornwall’

(Quinnell 2004: 187).

‘Courtyard houses have now been demonstrated to belong to the Roman period rather than the Iron Age’

(Quinnell 2004: 188).

These two quotes highlight the most recent trend in the interpretation of settlement in Cornwall during the Later Iron Age - Roman transition. A distinct transformation in the settlement record is currently envisaged, marking the onset of the Roman period in Cornwall, around the mid 1st century AD. As has already been claimed however, this interpretation is arguably driven as much by a desire to clearly distinguish the Roman period from the Later Iron Age in Cornwall, as it is by the archaeological record.

In the following two chapters the case is made for the continuity of settlement and spatial relations during the Later Iron Age and early Roman period. This chapter reviews the evidence from excavated settlements of the period using the methodology established in Chapter 3. As a unique phenomenon, courtyard houses will be discussed separately in the following chapter.

4.1 The nature and extent of settlement over time

The central dataset of 77 sites has been subdivided by date and site type (see Fig. 3.5). By date, this is biased toward the Later Iron Age (LIA) and early Romano-British (RB) period. As identified in Chapter 2, this appears to be a function of the archaeological record, rather than indicating significant differences in the extent of settlement in Cornwall during the EIA (see 2.4.1).

The range of excavated sites does reflect the apparent shift from open to enclosed settlement between the EIA and LIA. Within this trend, the size of a collective ‘community’ suggested by the scale of open settlements of the EIA is larger than that embraced within the enclosed settlement of the LIA. Interestingly, however, open villages of courtyard houses, LIA in date, do appear more comparable in scale with the open settlements of the EIA (see Chapter 5).

4.1.1 Structural dimensions and structural area

For the consideration of structural dimensions the dataset has been grouped into the following categories: Earlier Iron Age/Later Iron Age (EIA/LIA); Later Iron Age (LIA); Later Iron Age/Romano-British period (LIA/RB); Romano-British period (RB). This is because many structures span two chronological periods leading to their inclusion into either the EIA/LIA category or the LIA/RB category. The chronological distinction at these sites is often such that separate phases in their occupation cannot be distinguished from the excavation reports. In providing categories that bridge two periods a better image of trends in the spatial variation of structures will be achieved. The diameters and areas of structures are examined by chronological period below, after which continuities and transformations in structural diameter and structural area from the LIA-RB period

are discussed. For reference, a table displaying all structural dimensions and/or areas is included in Appendix 5.

4.1.2 Earlier Iron Age

For the EIA dataset, chronological distinction between structures of EIA date and those which continue into the LIA is particularly difficult to ascertain from the limited details of early excavations. At Bodrifty (Fig. 2.2), a distinction is apparent between the diameter and orientation of structures and their date of construction. The Bronze Age settlement consisted of several relatively small structures (c. 6-7m in external diameter) orientated for the most part to the south-west and situated within an extensive field system (Dudley 1956). These structures continue in use in the EIA and are later joined by several new structures which were larger (c. 10-11 m in external diameter), and orientated to the south-east. This difference in structure diameter is amplified when related to the resulting difference in internal living area in m² (Table 4.0)

At Gurnard's Head a similar distinction between two sizes of structure is evident, and these diameters are similar to those at Bodrifty (Fig. 4.1). On this basis, a distinction between EIA and LIA structures at Gurnards Head could be proposed. No obvious correlation exists between the nature of construction and the apparent or postulated differences in the size and date of structures. However, at Gurnards Head LIA structures are being built alongside EIA structures where as at Bodrifty, some LIA structures are re-built and expanded over the foundations of EIA structures. This difference is discussed further below.

At Sperris Croft, the structures originating in the EIA are comparable in size to the earlier structures at Bodrifty (c. 8m in diameter). As a whole, the structures from these EIA sites (Fig. 4.2) are larger than many structures of the Bronze Age

‘pounds’ of Dartmoor (c. 4-5m in diameter Todd 1987: 125-126), but closer to the size of some Middle-Later Bronze Age structures from Cornwall such as those from Trevisker and Callestick (c. 8m in diameter, Apsimon & Greenfield 1972: 307; Jones 1998-9b: 12). The single structure at Trevelgue (Nowakowski 2000) is the most distinct and apparently anomalous feature of the EIA/LIA dataset. The area of this triple-ring structure is huge, and could be related to its use for metalworking.

4.1.3 Later Iron Age

The graph displaying structural diameters for LIA sites (Fig. 4.3) displays a peak of internal diameters around 7m, which is matched by a cluster of external diameters at c. 9-10m. Both peaks represent the same group of structures from Carn Brea. Aside from this, there is a relatively even distribution of internal and external diameters within the dataset, which range from 5m-13m. The largest diameters recorded (12.5m and 13m) are internal measurements; the larger external measurements for these structures are unknown. Also of note within the graph is the absence of LIA structures with a diameter of less than 5m, which are present in other periods.

4.1.4 Later Iron Age / Romano-British period

The range of internal and external diameters for LIA/RB structures (Fig. 4.4) is similar to that for the LIA, although smaller structures are also represented here (particularly as the smallest diameters recorded for the LIA/RB are external measurements). The data for the LIA/RB period draws information from only two sites. Of the four records of internal diameter, the two structures from Castle Gotha (10.5m and 12m) are both significantly larger than those from St Mawgan-

in-Pyder, and although not distinguishable within the LIA/RB timeframe, the oval structure (with the largest diameter) is late, being early RB in date.

The seven structures recorded from St Mawgan-in-Pyder provide most of the data for external diameters. Three clusters of structures can be distinguished on the basis of their size (3.6m and 5.5m; 7.3m and 7.6m; 9.1m and 9.8m), and although the difference in diameter between these groups is relatively small (between 1-2m), this again has a dramatic effect on the size of living area within the structure, as well as the outward appearance of the structure (Fig. 4.5 and discussion below).

4.1.5 The Romano-British period

Once again, the number of structures of secure RB date with recorded internal diameters is higher than those with recorded external diameters (Fig. 4.6). Of note within the RB dataset is the small structure of c. 3m internal diameter from Trethurgy. This structure is a four-post structure and, considering the apparent lack of large subterranean pits at Iron Age sites in Cornwall, probably reflects a form of storage rather than a domestic or animal living space (see discussion in 2.4.4).

4.1.6 Discussion: structure diameter and structure area

The internal structure diameters for EIA – RB structures in Cornwall ranges from c. 2.5m to c. 14m, and the mean diameter shifts between chronological periods (Table 4.7). The mean diameter has been calculated using internal measurements where possible; external measurements have been used if no other value is available. The mean diameter for EIA/LIA structures is in reality closer to that for the LIA and LIA/RB periods as the majority of EIA/LIA diameters recorded are

external measurements. The dramatic increase in the mean diameter of structures in the RB period reflects the current available data. The mean for Iron Age structures in Cornwall is close to that calculated by Pope (2003) for central and northern Britain.

With respect to the transformations in internal and total area over time, certain trends are apparent (see Fig. 4.8 and Fig. 4.9). If the internal areas for structures from the EIA/LIA and LIA are compared, a general increase in the standard internal area of structures is clear. There is a slighter increase in the internal area for the majority of structures dating to the RB period, although what is equally significant here is an expansion in the gap between smaller structures and larger structures. In previous periods the distribution of structural areas are more evenly distributed within the range of internal areas. These two patterns will be returned to below.

Consideration of structural diameters has highlighted some interesting patterns that require further consideration in relation to the wider archaeological record. What is clearest is the degree of relative continuity in the size and scale of the structures being constructed throughout the Iron Age and early Roman period in Cornwall. This is an issue that needs to be situated within other aspects of the spatial and material record.

4.2 Structural area and settlement ‘type’

Comparison of structural area and settlement ‘types’ suggests no significant difference in the sizes of structures between different forms of settlement (see Fig. 4.10 and Fig. 4.11). All site types appear to reflect a range of structural areas, which in part can be explained by the transition to slightly larger structural areas over time, as discussed above.

Hillforts would appear to lack the smallest structures present at other site types. Hillforts do not feature in the EIA which may help to explain why there is a distinct fall in the number of smaller structures in the LIA. However, this does not explain why hillforts lack smaller structures, particularly when rounds and enclosures broadly contemporary to hillforts do include these. This is likely to relate to the differential roles of these settlement forms within the community instead.

In the following chapters an argument is developed in which many hillforts, cliff castles and certain large enclosures are interpreted as communal sites, used seasonally or temporarily for the collective gathering of social groups that are distinct from, or outside, the 'household' groups of everyday social practise. These temporary gatherings need not necessarily reflect the coming together of the 'wider community' as a whole, but might be the result of small-scale seasonal movements of members of different households, as part of transhumance practices associated with the grazing, breeding and trading of livestock, or in relation to metalworking or pottery production. The relevant evidence is discussed in detail below.

4.2.1 Material assemblages

The material culture from settlements is discussed in detail within Chapter 6. Here, however, it is worth considering the forms of material culture evident in the region, and the potential insights these distributions offer toward the nature of social relations at a regional scale. Appendix 7 shows the comparative categories within which the range of material culture documented from the 45 non-courtyard house sites in the dataset was considered. In many instances the records of this material are very limited. Several details are worth highlighting however.

Gabbroic South-Western Decorated wares dominate the pottery assemblages of LIA sites, and are frequently combined with the later cordoned wares. However, certain sites such as St Mawgan in Pyder (Threipland 1956), Carvossa (Carlyon 1987) and Kilhallon (Carlyon 1976), display evidence of access to a wide and varied range of material from further afield such as decorated Samian wares and amphorae, Oxfordshire colour coated wares and black burnished wares, as well as a range of bronze and iron objects – particularly brooches. This is in stark contrast to the range of material found upon the majority of sites – which aside from Gabbroic pottery may produce a single brooch or pin.

These three sites (St Mawgan in Pyder, Kilhallon and Carvossa) date to the LIA-Roman transition and/or early Roman period in Cornwall and, in the model for Iron Age social organisation and identities proposed below, these sites played a significant role in the development of community identities after the Roman invasion of Britain (see section 7.4 and Fig. 6.3). A number of other sites had similar access to differential resources, if not quite on the same scale as those mentioned above. At Maen Castle, a range of ‘Mediterranean imports’ are documented from the early excavations (Herring 1994). Early imports at Gurnards Head included mortaria with samian wares featuring later, from around the 2nd century AD (Gordon 1940: 107-110). Fine burnished wares with spiral and duck decoration also indicate close links with Brittany, common contemporary motifs in the region (Gordon 1940: 107-110).

As well as 4000 sherds of local pottery spanning the EIA to RB periods, Trevelgue Head produced sherds of non-local Samian and Oxfordshire colour coated wares, a single amber bead, 29 copper alloy items including a bronze fibulae and almost 50, mostly unidentifiable, iron items. 88 Roman coins were found, mostly strewn throughout the abandonment layers of the large timber roundhouse, around the middle of the 2nd century AD (Nowakowski 2000). A

similar practice of coin scattering is evident from the abandonment levels of the only 'Roman' villa at Magor (O'Neil 1933: 13-14).

Large-scale ironworking is well attested at Trevelgue Head cliff castle by vast amounts of iron slag (see 4.4.7). Smaller-scale metalworking and possible glass production is evident at The Rumps cliff castle. The occurrence of metal and glass production at these sites has been argued to reflect a wider pattern whereby certain craft specialisation was regarded as socially liminal and thus undertaken in geographically peripheral locales (see Sharples 1990, Hingley 1997). This, combined with the extent of exotic material found at these sites supports the suggestion that cliff castles were locales where geographically and temporally distant relationships were negotiated (see Cripps & Giles forthcoming and Chapter 7).

4.3 Structural area: courtyard houses and non-courtyard house settlement

Fig. 4.12 compares the internal and total areas of courtyard house structures with non-courtyard house structures of the LIA/RB and RB categories. The lack of total area data for non-courtyard house settlement must be stressed. At several sites only the internal areas of structures were available, and the number of non-courtyard house sites represented in general is restricted by biases in preservation and visibility of their remains. Courtyard house structures are much easier to identify, measure and survey, than non-courtyard house structures.

Despite such biases, Fig. 4.12 still highlights a clear difference in size between courtyard and non-courtyard house structures. The difference in size is much greater between total areas, as is the difference between internal and total areas of courtyard houses themselves. This reflects the spatial impact of the wide courtyard house walls – not so much in terms of the internal 'living space', but

rather in the outward appearance of scale and monumentality of courtyard house structures. This investment in the outward appearance of the courtyard house structure is evident on a scale which does not occur for other structures. There is no reason why non-courtyard house structures could not develop thicker walls, but as will be argued later, for non-courtyard house settlement the investment in monumentality appears at the scale of the enclosure, rather than of the individual structure.

4.4 Structural design

4.4.1 Buildings of the British Iron Age and early Roman period

‘Converting space into places through disruption, architecture brings meaning to the spatial dimension’

(Glassie 2000: 21).

An expansive knowledge and high level of skill in the construction, maintenance and transformation of structures is clearly apparent in later prehistoric Britain. In modern western society, architectural design is the preserve of specialists, and construction, of skilled professionals. Both processes are awash with mathematical formulae, calculations and specialist skills. In later prehistory, however, construction is unlikely to have been so alien (Pope 2003: 180-197, Gebremedhin 1971: 120). Knowledge of constructional techniques and ways of building would have been passed on from generation to generation, in the same way that building techniques are still shared amongst small-scale communities today. Glassie (2000: 45) describes architectural plans as markers of the ‘cultural distance’ between those who conjoin in a building project: the more minimal the plan, the closer the architectural idea shared by the builders. Thus the process of

construction can be seen to facilitate the cultivation of cultural identities and community ideologies.

In conjoining and reciprocally sharing labour, knowledge and experience, architecture can build and reinforce social relationships (Glassie 2000: 26). Although individuals within prehistoric groups may have had specific skills and led different teams of people in various activities relating to the build, it is the wider involvement in building, and indeed, the additional efforts required to support teams of builders with food and resources, that is likely to have made construction in prehistory a truly communal activity (although not necessarily an 'equal' one).

This has many implications; not least in the way in which relationships were developed through the processes of building and maintaining structures. Of key significance for the present study is any tension and/or harmony between scales of identity and organisation exhibited through the structural design; between the individuals involved in the laying out, manufacture and assembly of structures; the personality and the functional and ideological concerns of the future inhabitants of the structures; and the inherited knowledge of how to build and construct a house, and wider cultural significance of particular elements within a structure. Incorporated within every aspect of these tensions is the relationship between cultural *tradition* and the setting out of *new* identities, be they at the scale of the household and/or a larger social group. House designs, passed on through oral traditions and learned alongside peers and elders can embody an individual's identity; a combination of elements which reflect the influence of direct individuals and broader cultural markers, alongside specialist workmanship, subtle differences in technique and personal preferences relating to individuals and factors relating to specific household desires and needs (Brück & Goodman 1999: 2-15).

In the transmission of knowledge concerning how to build, in the construction and maintenance of buildings, and as a consequence of these repetitive actions, in the experience of buildings, these structures are quite literal *expressions* and *embodiments* of the cultural identity of the inhabitants (e.g. Parker-Pearson & Richards 1994a). They reflect cultural knowledge and values, specific ties to ancestral members of the community, the passers of knowledge, of past successes and failures, and the relationships forged and reiterated through the social and physical efforts of construction.

4.4.2 Building traditions in the Iron Age and early Romano-British period in Cornwall

Construction details are known for 82 non-courtyard house structures. Structures have been ordered using the following categories:

Structural design

Post-built

Stake-built

Stone-built (single course wall)

Stone-built (single course wall, half circuit)

Stone-built (double course wall with core infill)

Stone-built (half circuit single course, half circuit double course)

Turf -built

Associated features

Occupation scoop/floor area (no evidence for structure design)

Penannular gully (no evidence for structure design)

Supporting features

Internal posts supports (central; no evidence for structure design)

Internal posts (ring; no evidence for structure design)

Internal posts (ring; associated with known structure design)

As well as the classifications of form listed above, the materials and construction methods of walls, roofs and floors have also been considered.

4.4.3 Roofing

Thatch is most frequently suggested as the basic roofing material for Bronze Age and Iron Age structures (Reynolds 1982: 180), and is used most frequently in illustrations and reconstructions (e.g. Quinnell 2004, Fig. 4.13). The functional pitch for a thatch roof is 45°-55° (Reynolds 1979: 33; 1982: 180). Cut turves are also possible as a roofing material. Pollen and charred plant remains from the structures at Penhale attests to the presence of wheat and barley which may have provided straw for thatch (Johnston *et al* 1998-9). At Reawla macrofossils indicate the presence of the same cereals, as well as grasses which could relate to the cutting of turves (Quinnell 2004: 186). There are two main issues that make a turf roof unlikely, however. A structure with a turf roof requires a fire constantly burning beneath it, to stimulate root growth. It is the root system that stabilises the turves and without it, the roof eventually caves in (Reynolds 1979: 42-44). Furthermore, the weight of a turf roof is considerable and requires a more gentle pitch than thatch: approximately 30° (Reynolds 1979: 43). An alternative explanation for the macrofossils at Reawla could be that grasses and other organic matter were mixed with clay and earth to create the daub for the inside and outside of the walls (Reynolds 1979: 34).

4.4.4 Structural materials

Circular stone-walled structures are a particularly familiar aspect of the settlement record throughout the Bronze Age, Iron Age and Roman periods of Cornwall (Quinnell 2004: 184). Wall thickness for most stone-built non-courtyard house structures of Iron Age and early Roman date in Cornwall ranged between 1-2m (see Table. 4.14). Although the use of stone may have been a familiar or 'traditional' element for some communities however, there is a significant degree of material variation in the structural record of the LIA and RB periods. The personification of household dynamics invested within courtyard house walls has already been alluded to and is discussed in detail in the following chapter. However, in the choice of stone and in the re-use of material within the walls of non-courtyard house structures, similar interplays between local identities and architecture can be witnessed.

With gabbroic clays from the Lizard dominating Iron Age pottery in Cornwall (Harrad 2003), the sourcing of stone as a construction material is one area in which regional preferences or 'identities' might be expected to feature more clearly. With outcropping granites available from a variety of places within the uplands (Selwood *et al* 1998), traditions and preferences for local stone could be expected. Where non-local stone is being used for household structures, more complex considerations, relating to the identity of inhabitants may be involved. At Grambla for example, the local source at the Mylor beds was overlooked in favour of granite from further afield (Saunders 1972). Was this intended as a statement of difference? In this light we should note the relatively unusual 'boat-shaped' structures and square enclosure of Grambla, which have long given rise to speculation about the 'identity' of the inhabitants. Does the combination of non-local building materials and structures shaped like boats, used to travel the coasts, indicate a 'foreign' descent for this community? Or were the inhabitants of Grambla involved within specific trading relations and networks of social

contacts which were expressed through their domestic architecture? And what effect might the Roman invasion of Britain have had in cementing or facilitating the basis of this apparent expression of difference?

Re-used material such as quernstones (both broken and in mint condition) frequently occur within the walls of non-courtyard house structures. All too often these have been explained in terms of practical attempts to save time and effort by utilising existing material on site, but the meanings invested within these objects in their use prior to the construction of a building should also be given more consideration (e.g. Gosden 1997, Moore 2005). As is argued below, the incorporation of 'historic' or 'meaning-full' material within non-courtyard house structures may have aided the reproduction of social identities at the scale of the household as well as facilitating the distinction of these household identities from the broader community character or ideology.

During the Bronze Age, actions and events formally 'closing' structures after abandonment have been identified at several Cornish sites (e.g. Jones 1998-9b; Nowakowski 1991, 2001). These include the spearing of structure floors (particularly hearths), the blocking of structure entrances and the deliberate inward collapse of structural walls. The intentional decommissioning and 'burial' of such structures has been used to suggest that these buildings were considered to have a form of 'life' whilst in use (Nowakowski 2001). Similar attitudes toward structures are attested ethnographically, once again highlighting a need to think a little deeper about processes of construction and abandonment, and toward the meanings invested within the materials chosen for structures, and their performance or role in being there (Cameron & Tomka 1993).

4.4.5 Structural design and chronology

A total of 44 out of the 82 non-courtyard house structures (53.6 percent) had outer walls of stone; 18 (21.9 percent) had a different form of outer design (post-built, stake-built or turf walls), and 19 had no evidence for an outer wall (23.1 percent). 29 structures (35.3 percent) used some form of timber supports within the structure, although only 19 (23.1 percent) have evidence of both an internal timber ring and external 'wall' (Fig. 4.15).

A recent evaluation of the design and use of circular structures in central and northern Britain (Pope 2003) provides a useful comparison for the dataset from Cornwall, although Pope's dataset includes a small number of structures from the Later Neolithic and Bronze Age as well as those from the Iron Age and Roman Iron Age. Of particular note is the similarity in the percentages of particular structural designs between the two datasets (Fig. 4.16).

4.4.6 Structural design: EIA-LIA

The dataset for Cornwall is more informative when categorised by period (Fig. 4.17). All the EIA/LIA structures include stone within their structural design. This trend must in part be due to preservational bias. Enclosed sites are especially rare amongst the few known EIA sites. Without the help of enclosing banks and/or ditches - prominent features of LIA and RB landscapes - the only easily visible identifier of a site is physical structural remains above ground. In this way, stone structures should be expected to be a more prominent trait of the EIA dataset. This is also true of the LBA, and for both periods the significance of this bias is arguably reinforced by the dominance of upland or coastal settlement within the dataset, where outcropping stone is more prevalent and less susceptible to damage from later agricultural activity.

Stone-built structures are also favoured in EIA enclosures and the two cliff castles of EIA date. Cornish cliff castles have some of the most significant enclosing banks and ditches of all settlement 'types' within the region, warning us against any simplistic division of structure type or form in terms of the nature of enclosure – e.g. the explanation of stone-built structures on the basis of an increased need for 'defence' or 'security'.

Stone-built structures are not simply a characteristic of EIA cliff castles, but of all cliff castles, a notable trend compared to other settlement types (see Fig. 4.18). This might be a result of their rocky coastal location and the difficulties of cutting postholes into bedrock. The cutting of bedrock is undertaken on a much more massive scale in the construction of the enclosing ditches of cliff castles, however, and certain cut features have been found within the interiors of some cliff castles (e.g. the penannular gullies at The Rumps). Such practical considerations would thus seem unlikely to provide the sole reason for stone-built structures at cliff castles. If, as is suggested, cliff castles performed a range of roles for the wider community with some being occupied intermittently at times, and for relatively short-term periods of time by groups which drew from a number of households, then more durable stone structures which could better sustain coastal weather conditions, particularly if left unoccupied for periods of time, might have been preferable.

Where EIA sites have been excavated, the evidence for structures of timber or turf is rare. At Carn Euny, a single timber building apparently co-existed with some of the earliest stone structures on site, but apart from this, evidence for EIA timber structures is lacking. This is in notable contrast to the evidence from Devon (e.g. sites along the A30, Fitzpatrick *et al* 1999; Raddon, Gent & Quinnell 1999; Gold Park, Gibson 1992). Thus, although the predominance of stone structures in the EIA is surely in part a product of biases in preservation, we may also envisage it

as a dominant and enduring structural trend for the period. The co-existence of stone structures within both open settlements and enclosures in the EIA once again suggests against any simplistic explanation in terms of security.

No obvious distinctions are apparent between single- and double-walled structures and the type of sites upon which they feature. The single-walled structures from Gurnards Head do represent the smallest circular structures at the site and this might relate to their potentially early date (see 4.1.2). One could postulate that, in the absence of internal timber supports, the larger internal area of some structures necessitated a thicker outer wall. If so, the desire for increasingly large structures across the EIA and LIA could be one factor in the shift from single-walled to double-walled design. In the LIA, the number of single stone wall structures increases, and the number of double-walled structures decreases. This is matched by a dramatic increase in the use of internal timber supports, particularly internal timber rings. Once again however, one should guard against simplistic causal explanations: although the use of internal timber rings increases, only one of these is accompanied by evidence of single stone wall.

4.4.7 Trevelgue Head

The very large structure at Trevelgue Head is worth separate mention. This structure was occupied from the EIA through to the RB period (Nowakowski 2000: 29-32) and is the largest structure within the database, *c.* 14m in diameter (Nowakowski 2000: 22). This is larger than any circular or oval structure recovered from Cornwall of Iron Age or Roman date. It is also the only triple-ring structure in the database, with two inner rings of timber posts and an outer wall of double course granite blocks infilled with stones.

The nature of some double-ring and triple-ring structures has recently been called into question (Gilbert pers. comm. Pope 2003: 98-100). The outermost ring of posts of double-ring structures such as Little Woodbury and Longbridge Deveril Cow Down have been argued to represent some form of non-structural enclosure (Pope 2003: 98), frequently in evidence at similar roundhouse sites, such as Pimperne (Reynolds 1979: 103). Potential new inner rings of timbers have also been identified within the postholes of the interior of Little Woodbury and Longbridge Deveril Cow Down, meaning these structures can still be classed as double-ring structures, albeit smaller than originally interpreted (Gilbert pers. comm.). With reference to such critical analyses however, the large structure from Trevelgue Head can be securely categorised as of triple-ring type. Compared to triple ring structures from central and northern Britain, the structure from Trevelgue is relatively typical - with an internal diameter of 14m it fits neatly within the diameter range of most triple-ring structures in Britain (c. 11m-16m).

4.4.8 Structural design: LIA-RB

From the LIA post- and stake-built structures were introduced into the dataset. Stake-built structures only feature within the LIA; two examples from the earlier phases at Castle Dore and one example from the interior of Killibury. All three examples utilised an inner ring of timber posts as a support for the roof. Stake-built structures are often interpreted as having a temporary or seasonal use (e.g. Stopford 1987). In many instances, Pope (2003: 95-97) has argued that stake-built structures may actually have had an outer wall of turf, revetted on the inside with stakes and/or a wattle fence. This theory is supported by hut A at St Mawgan-in-Pyder which had turf walls lined with timber and an internal ring of supporting posts (Threipland 1956: 42). This evidence supports the notion of St Mawgan-in-Pyder having had, at least in part, a number of seasonal and/or temporary occupants (see Fig. 6.3 and Fig. 6.4).

Within the LIA, post-built structures are less frequent than stone-built structures, but these increase significantly in the LIA/RB period. This reflects the presence of post-built structures at sites which are chronologically transitional, but where there is also clear variation in the style and shape of co-existing structures. Post-built structures can be circular (e.g. The Rumps, Castle Gotha, St Mawgan-in-Pyder), oval (e.g. Trethurgy), or rectilinear (e.g. Castle Dore); and exist alongside stone- and/or turf-built structures, often distinctly oval in shape (e.g. Castle Gotha, Trethurgy, Castle Dore, St Mawgan-in-Pyder). The final phases of the LIA and the LIA/RB period see the greatest variation of style, nature of construction, material and shape of structures *within* sites as well as between them.

4.4.9 Structural design and settlement type

Fig. 4.18 compares structural design and settlement 'type'. Open settlements appear to consist purely of stone-built structures and the figures exhibited within the dataset are conservative. At Sperris Croft for example, a single structure of double-walled construction is the only example detailed, although all seven structures from this site were probably of the same design. However, this conservatism may be helping to balance the preservational biases hindering the discovery of potential timber structures within open settlements of EIA date, as discussed above. Having said this, developer-funded excavation has begun to identify Bronze Age and LIA examples of such sites (e.g. Gibson 1992; Jones 1998-9a, b). The extent to which a lack of post-built settlement in the EIA is a real trend or a result of archaeological bias will only be resolved with further excavation.

4.5 Shape in plan

Examination of structural floor plans reveals a widespread tradition of circular and sub-circular structures throughout the Iron Age (see Fig. 4.19). Aside from the Roman fort at Nanstallon, rectilinear structures have been identified in the final LIA phases at Castle Dore, at the LIA/RB transition site at Carvossa, and from the RB phases at Trethurgy. Many sites, either established in the RB period or which continue into the RB period, continue to utilise circular or sub circular structures however.

Quinnell (2004: 184-189) argues that oval structures are only found in Cornwall during the RB period. Examples can be tentatively dated to the LPRIA/RB period at Castle Dore and to the RB period at Trethurgy (Fig. 2.19), Castle Gotha (Fig. 2.19), Shortlandsend and Penhale Round. Boat-shaped structures with tapered ends also appear in the RB period, notably at Grambla (Fig. 2.19). Oval and boat-shaped structures consist of single stone walls, often granite or shillet upon which the roof timbers rested. An internal ring of timber supports is lacking from these forms of structure, although at Penhale Round, postholes were identified close to the perimeter of the structure which may have been related to the roof support (Johnston *et al* 1998-9). Due to this apparent lack of internal timber settings, the two oval 'enclosures' identified at Threemilestone round (Schwieso 1976) could also be considered as potential oval structures (Fig. 4.20).

The use of post pads for timber roof supports has been considered a possibility for oval structures, but no evidence for these have been found within the well-preserved floors at Trethurgy (Quinnell 2004: 185-6). In light of the reconstructions offered at Trethurgy (see Fig. 2.34), the suggestion that the large stones with deep depressions found at many courtyard house structures are post pads for single central roof supports seems less likely. A viable roofing method involving the weight of the roof being distributed through the walls (like that

suggested for the oval structures above, as well as the later, structurally identical ‘figure of eight’ houses (c. 7th century AD) from the Western Isles), would seem much more probable for courtyard house structures (see 2.4.12).

4.5.1 Discussion: structure shape and chronology

At present the distinction between circular and oval structures is used as part of a cultural and temporal check list, with the construction of circular structures suggested to cease in Cornwall with the Roman invasion in 43 AD (Quinnell 2004: 187). This, I believe, is another example of a subconscious desire to differentiate the Roman period from the later prehistoric context of Cornwall.

Within the dataset, this chronological difference is not as distinct as Quinnell suggests. Structural traditions in particular would appear to show fairly lengthy transitional phases, especially when over relatively large geographical areas. In eliminating Romano-British circular structures, the current narrative is once again attempting to identify a distinction between the ‘Iron Age’ and ‘Roman period’ which is not clearly evident within the archaeological record. The argument that all courtyard houses are of Roman date (Quinnell 2004: 188) is also challenged in Chapter 5. Are such suggestions the result of a subconscious desire to situate Cornwall into a similar trajectory of development to other regions of the Roman province of Britain (i.e. that rectangular structures replaced circular structures in the Roman period)? Such a transition has been shown to be an over-generalising portrayal of the archaeological record elsewhere in Britain also (e.g. Moore 2005a).

Interpretations of the archaeological record need to recognise the social complexities that are invested within the construction of the built environment, a point that for Cornwall has traditionally been more frequently recognised in

relation to monumental landscapes (e.g. Barnatt 1982), but discussed to a lesser degree in relation to the domestic, everyday spheres of life. Simplistic oppositions between shape, fabric, construction, or chronology not only result in an over-generalisation of the archaeological record, but also of the complex negotiations of social and physical relationships that are bound within them.

From the 2nd century AD, oval structures appear to dominate the archaeological record, but these can be further subdivided into oval, sub curvilinear and boat-shaped structures (see Fig. 4.21). Rectilinear structures are also a feature of some LIA and/or Roman sites in the region (as discussed above) and magnetometry survey at Carvossa has identified a rectilinear structure of probable Roman date (see Appendix 3, pages 361-365 and 381). In addition, oval structures are clearly present in Cornwall prior to the Roman period - and to a greater degree than currently acknowledged. In light of this evidence the roots of oval houses can reasonably be sought in the last century of the Iron Age.

4.5.2 Structural shape and area

Increasing the ovality of a structure is one way of increasing house size without necessitating a change in house type (Walton, 1952: 139). In this respect, the move toward more oval structures in the RB period should relate directly to the gradual increase in structural areas over the same period. Fig. 4.21 and Fig. 4.22 compare structural shape and internal and total areas, across all time periods. This graph displays the range of structural areas and not the absolute number of structures.

As these graphs show, oval structures in Cornwall are generally larger than most circular structures. Several circular structures exist that are bigger than the largest oval structures however. There was the capacity to construct circular structures

that were within and beyond the sizes exhibited by oval structures in the region, and as such, the increase in ovality exhibited toward the end of the LIA and into the RB period seems likely to have resulted from more than a simple desire for greater internal space.

Although the transformation to a more oval structure may not require radical changes to construction techniques, it affects the way in which interior space can be sub-divided, as well as the outward appearance and balance of the structure. When compared to the rest of the LIA settlement record, the ovality of these structures offer a compromise between past circular traditions and new forms of building that are emerging elsewhere in Britain and on the western Atlantic seaboard (e.g. Sastre 2002, Smith 1997: 230-231). It is in this context that courtyard house structures develop in Cornwall –buildings which are more oval in shape than they are round. The hybridization of structural forms and domestic space, across the LIA-RB transition is a theme that will continue to be examined in the remaining chapters.

4.6 Structure orientation

Fig. 4.23 and Fig. 4.24 display the orientation of non-courtyard house structures by chronological period. Orientation could only be elicited for 34 of the 82 non-courtyard house structures. Structures of EIA/LIA date appear to concentrate around the south-south-east, south, and south-west, whilst structures from the LIA appear to focus more toward the east, east-south-east and south-east. As some of the structures from these two categories overlap chronologically, an overall concentration from the east clockwise to the south is evident.

This mirrors patterns suggested for southern Britain (Oswald 1997) and central and northern Britain (Pope 2003). Within Pope's dataset, 76 percent of structures

orientated between north-east and south, with 48 percent situated between east and south-east. If the available data from all periods in Cornwall are combined, 74 percent of structures orientated between north-east and south, with 37 percent of structures focusing between the east and south-east. When examined by period (Fig. 4.24) LIA/RB and RB structures demonstrate a slightly broader distribution of orientation within the range from north-east to south.

4.6.1. Orientation and cosmologies

With such similarities in orientation, shown within the datasets, can we assume some form of overarching cultural structure or cosmology in operation within Iron Age Britain? This subject has produced much debate in recent years, various authors suggesting that roundhouse orientation was structured by cosmological referents: the sun's passage around the roundhouse and the midwinter and midsummer equinox (Fitzpatrick 1994, Giles & Parker-Pearson 1999; Oswald 1991, Oswald 1997; Parker-Pearson & Richards 1994b). Others have criticised the 'cosmological model' for roundhouse orientation and suggested that micro topographical and environmental influences in the orientation of structures have been too readily overlooked (Pope 2003, Forthcoming). Although the data compared above display very similar trends, we should be wary of automatically assuming a single generalising explanation for structure orientation.

Initial analyses of the site-based context of structural placement and topographical position would seem key to the interpretation of roundhouse orientation in the Iron Age. This is not to negate the potential overarching effects of the environment – which may help to explain the majority of structures facing away from the direction of the prevailing winds. However, a significant number of structures facing directions other than the south, south-east and east highlights the need to develop site based understandings of structural developments before

building up wider cultural narratives (see also the discussion of the site based organisation of courtyard house structures in the courtyard house gazetteer). It is for this reason that a site-based examination of structural layout and orientation is now offered.

4.7 Intra-site orientation and spatial layout

4.7.1 Open sites

The unenclosed settlements at Sperris Croft and Bodrifty display clearly different approaches to structure orientation. At Sperris Croft, the structures were arranged in a line with southern and eastern orientations (Weatherhill 2000: 109). At Bodrifty EIA structures were amongst a cluster of pre-existing structures and faced south-west (Dudley 1956: 5). In the absence of further detailed information for these sites it is difficult to examine the relationship between structures, their views and orientations. As the structures within each site had similar orientations however, we can perhaps assume that a broader policy of orientation was in operation, centred on factors external to the community (i.e. wind, light, landscape, viewshed), as opposed to a more community orientated policy that would have encouraged visual connections and spatial relationships between households within the site. In contrast, for enclosures and courtyard house settlements, a desire for unrestricted views between structures appears to have been more important than a single dominant structure orientation (see below and 5.12).

The south-westerly orientation of LBA structures at Bodrifty could be regarded as a continuation in the trend of orientation of LBA structures in south-western Britain in general (Oswald 1997: 91). Oswald also highlights the contrast in the south-westerly orientation of LBA structures in south-western Britain and the

south-easterly orientation of contemporary structures in south-eastern Britain (Oswald 1991). Could this pattern reflect a desire to orientate structures toward the sea? Perhaps. However, the sea and its cultural associations are available to the north, west and south in Cornwall, leaving no simple reason for orientating toward the south-west. In addition, having begun to deconstruct explanations of overarching cosmologies for roundhouse orientation, we should perhaps be wary of shifting toward another, generalising explanation regarding the sea.

4.7.2 Enclosed Sites

For enclosed settlements, a series of intra-site factors can become a more apparent focus for the structural orientation and/or spatial layout of structures. For the majority of rounds and sub-rectangular enclosures, structures are often situated around the periphery of the interior, in the lee of the enclosing rampart. This frequently leaves the interior of the enclosure empty (e.g. Cunliffe 1991: 256; Johnson & Rose 1982: 163; Weatherhill 2000: 21).

Whilst this is true for several excavated sites however, certain rounds display notable variations to this format, whilst at most rounds we simply do not know what occupies the central area of the interior as these areas remain unexcavated.

4.7.3 Central 'space'

Differences in the manner in which structures were located and orientated within enclosures highlight very different approaches toward the access and social experience of space. At Trethurgy Round and Penhale Round a central area was retained, free of structural features. This spatial arrangement also appears likely at Castle Gotha, Trevisker, and Grambla (see Fig. 4.25). At Trethurgy and Penhale,

structures appear to be orientated toward this central space and toward the entrance as well. Similar examples from Devon (e.g. Shaugh Moor) may hint at this being the dominant (although by no means universal) supra-regional situation.

In many instances the central area of these enclosures is currently regarded as a communal space, for the practice of site-based tasks or roles, the effects of which perhaps extend beyond that of the immediate household. This is a communal space for communal activities, within full view of community members. The orientation of structures toward this space indicates the embracing of this scale of interaction. This is perhaps best understood by envisaging how differently the spatial dynamics of the central area could be interpreted if each household orientated itself and its building away from the centre and the direct view of others, as at Cadbury Castle for example (Barrett 2001b).

Differences in spatial philosophy can thus be used to explain variation in structure orientation. Indeed, the frameworks governing structural orientation within enclosures and rounds in Cornwall appears to have been socially determined at the scale of the individual site. Some clusters of courtyard houses also appear to have had an orientational framework guiding their on-site situation, and as with certain rounds, were located around a common 'central' area (see 5.12 and Fig. 4.27 below).

More significantly perhaps, the internal layout of certain rounds could be suggested to resemble the philosophy of space within courtyard houses, albeit on a notably larger scale (see Fig. 4.26). The arrangement of structures around the periphery of enclosures mirrors the placement of rooms around the courtyard of a courtyard house, the walls of the courtyard house structure being replaced by the surrounding ramparts of an enclosure. However, the difference in scale between these two arrangements would have had significant repercussions in terms of the

way in which social relationships were forged and the regularity and presence with which individuals were sensed and encountered. This observation is developed further in Chapter 5.

Certain rounds do have features located in the centre of their interiors, or spanning their interior (i.e. Reawla, Threemilestone, Porthmeor). At Reawla and Threemilestone, the chronological distinction of these features, for differing reasons, is unclear, but this does not change the fact that very different mechanisms toward the use of space are in operation here. This point is illustrated best within the round at Porthmeor, where the interior was organised into parallel terraces, rather than concentrically around a central space (see Fig. 4.27). These terraces appear to have employed small-scale ‘garden’ cultivation, which at other sites is often associated with terraces connected to internal structures. In the later courtyard house phases at Porthmeor, internal structures become focused in specific areas with each area still retaining a ‘central’ space (see Fig. 4.27). These focal spaces are not at the centre of the enclosure but do share a central position within each cluster of structures. Once again then, organising principles concerning shared social space are helping to guide the orientation of structures within the enclosure, but in this instance, these are at the scale of the household or extended household, rather than at the scale of the whole community, resident within the bounds of the enclosure.

4.7.4 Settlement peripheries

The above discussion has focused upon the creation of central areas, interpreted as functional and ideological ‘communal’ space. This, however, overlooks another important region within enclosures: that of the periphery. By focusing upon the relationship of internal structures with the periphery, instead of their

relationship to the centre, a clear trend in the spatial organisation of rounds and enclosures becomes apparent.

The area within 10m of the bank and/or ditch is noticeably the most utilised area of both rounds and enclosures (see Fig. 4.28 and Fig. 4.29). This cannot simply be explained by biases in the location of excavation. In addition, a physical connection between structures and rampart occurs at several sites (Threemilestone, Castle Gotha, Trethurgy, Porthmeor, St Mawgan-in-Pyder). In most instances this association is notably slight. At Castle Gotha, the stone-built oval structure, dating toward the latter period of early RB occupation cut the bank slightly but quite clearly, at its western end (Saunders & Harris 1982: 124). At Threemilestone three structures (8, 12 and 13) defined by penannular gullies, once again slightly, but quite clearly cut the bank, with structure 13 employing a revetment of quartz blocks against the base of the bank and the old turf layer below. At Porthmeor, some of the stone-built non-courtyard house structures, and both courtyard house structures were abutted against the enclosing wall of the 'round' (Hirst 1937: 33). In structural phases post-dating the time frame of this study, the remodelling of house X into structure X2 at Trethurgy also resulted in the gully of the structure being expanded to cut the rampart of the round on its western edge, but once again, only very slightly (Quinnell 2004: 170-171).

The most frequent association of structures with an enclosure bank occurs at St Mawgan-in-Pyder. The pair of structures D and E situated at the rear of the enclosure both drew upon the rear bank by having posts inserted into it, giving a visual sense of emerging from the enclosure ramparts (Threipland 1956: 50). Similarly the post-built structure, 'hut V', at the entrance to the enclosure, cut into the edge of the in-turned rampart. When the timber phase of Hut V was demolished, the rampart was remodelled, and the in-turned rampart end revetted, capped with stone and built over the old post- settings of hut V in order to regain its proper line (Threipland 1956: 36-38). However, as a demonstration of the

apparent importance of an association with the rampart, hut V was rebuilt, this time in stone, in exactly the same position (see Fig. 4.30). This would appear to suggest that in some instances, the physical association of a structure with an enclosure rampart was very important.

In each of these instances, associations between structures and ramparts are minor, but this does not make them less significant. Where structures are associated with the surrounding bank, these actions must be seen as deliberate and purposeful. There is clearly no structural need to draw upon enclosure banks for support, and indeed, the slightness with which most structures are associated with the bank makes any potential structural gain minimal. In every instance the associations are so slight that they could have also been easily avoided; it was not a lack of interior space that caused these structures to infringe upon the rampart. At St Mawgan-in-Pyder in particular, the frequency of associations between structures and ramparts indicates a purposeful desire to draw upon the physical and visual support of the bank in the construction of dwellings.

When considered in context and in relation to other events such as foundation deposits (directly relating to the ramparts which enclose and bound, both physically and visibly, the resident community, see Chapter 6), actions of physically associating structures with enclosure ramparts gain additional meaning. Of significance, is the suggestion that spatial organisation within rounds and enclosures may have been facilitating the expression of identity at a scale that was broader than the individual household – that through the creation and use of central ‘communal’ focal areas, and in the affiliation of individual structures to enclosure banks, a wider group identity could be enacted or forged.

To this effect it is also interesting to note that several enclosures witnessed a prolonged sequence of re-modelling throughout their occupation (e.g. Castle Dore, St Mawgan-in-Pyder, Grambla, Trethurgy). This has interesting

repercussions for the interpretation of identity and the scale at which identity was reproduced if, as suggested, the enclosure boundary can be regarded as reflective of the resident community as a whole.

4.8 Built space

Fig. 4.31 summarises the calculations of the proportion of built space for those enclosed sites for which the appropriate data were available (full calculations are shown in Appendix 2). The interpretative potential for analyses of built and unbuilt space are discussed in Chapter 3. These calculations offer a statistical comparison of the ratio of built to unbuilt space within a site, providing a way of gauging the nature of spatial cohesion and/or variation between sites, and an insight to the nature and extent of activities both within and beyond the household and settlement. Although this statistical evaluation has previously been applied to built environments and communities elsewhere (e.g. Bulgarian tell sites Chapman 1991), the ease with which it can be adapted to the somewhat different settlement record of the British Iron Age remains untested.

What quickly became clear in compiling a database that tried to assimilate the evidence for built space in a strategic and comparable way was the inherent variability in the nature of the archaeological record and the manner of its excavation and recording, both within and between sites. This made it impossible to acquire comparable data for some sites, and placed restrictions on the figures produced for others. Predictably the main problem encountered when collating and assimilating the data concerned the restricted and differential recording of excavated material, an issue not always just restricted to early excavation reports.

The second main difficulty was dating specific structures and the main structural phases of a site. Often, this was due to a lack of associated dateable material, but a

degree of confusion in relation to the stratigraphic sequence at some sites also became apparent. Data for several sites had to be omitted in order to make the dataset as a whole comparable. Evidence from Trethurgy round illustrates the subtle variations in the location of buildings within the enclosure during its main period of occupation between the 2nd – 6th centuries AD, although the density of built space during this time does remain relatively constant (Quinnell 2004: 168-179). In order to gain a similar insight into some of the sites under consideration for this thesis, geophysical surveys by the author have been used to provide an indication of the nature and extent of features on-site, and have helped to illustrate the degree to which the evidence uncovered in excavation was representative of the site as a whole. The specific conditions applied to the sites considered in the following chapter are detailed in full in Appendix 2.

4.8.1 Interpreting the percentage of built space

The dataset for built space is small, but certain trends and distinctions can be proposed. Rounds are the settlement type for which the most comparable data for built space has been achieved. From these figures, it can be argued that the built space data for rounds does cluster, although this is around a relatively broad range from c. 20 percent - 40 percent built space. The density of settlement within these sites could be related to the suggestion that these rounds reflect the settlements of household units and groups – of a scale at which everyday social practices were undertaken. If so, the slightly bi-polar clustering within this range – either toward the 20 percent mark (Trevisker, Trethurgy, Goldherring) or toward the 40 percent mark (Castle Gotha, Shortlandsend, Threemilestone), may also indicate comparable differences in the typical number and/or scale of ‘households’ within the interior.

The density of built space within rounds is in stark contrast the percentages of built space at cliff castles such as Gurnards Head (1.41 percent) and hillforts such as Carn Brea (0.94 percent). There are examples of both cliff castles and hillforts with greater built percentages than these. However, additional evidence such as the regular cleaning out of structures at Gurnards Head and the difficult coastal conditions at cliff castles in general, it is argued below, lends this type of site toward an interpretation of intermittent or seasonal use, perhaps as part of periodic movements associated with the grazing and breeding of animals (see discussion below). The percentage of built space at cliff castles and hillforts does appear more varied and more complex and as such these sites may have been used quite differently across both time and space. It may be that in several instances the large area of many hillforts and cliff castles, combined with the variation in built space percentage, specifically related to the needs and demands of intermittent collectives of a larger number of the community, rather than the 'domestic' household. This variation in built percentage may also reflect problems in the definition and terminology of 'hillforts' however.

The three enclosures for which a built space percentage is calculable present a slightly more complex picture. Trevinnick has an unusually high built space percentage of 75 percent. This is accurate but seems likely to be an exaggeration due to the very small area of excavation: three trenches being targeted on the basis of magnetic anomalies picked up through magnetometer survey (Fox & Ravenhill 1969: 90-91), two very small trenches, which revealed no features, being placed at random. The value for St Mawgan-in-Pyder is closer to that of some of the rounds, and due to the extent of excavation, is probably representative. Bodrifty on the other hand has much smaller values for both structural phases of occupation within the interior: due to the visible structural remains at this site, this figure is the most secure of all three 'sites'. The small value for built space at Bodrifty is perhaps reflective of the sites origins as a widely space open settlement. If enclosure was as late as the mid 2nd century at Bodrifty (Harrod

2003, Fitzpatrick *et al.* forthcoming) we might envisage a resident community experiencing a very specific set of circumstances relating to a need and/or desire to 'enclose', but maintaining long-lived traditions of spatial relations developed through the wider 'open' settlement of the preceding centuries.

The distinction between 'enclosure' and round is a tricky one (see 2.4.6), and what the data for built space shows, if anything, is that enclosures can reflect the culmination of very different trajectories, which may help to explain the very different scales of built space exhibited within them. Trevinnick, a classic rectilinear enclosure typified within the Roman settlement landscape was constructed with different considerations and responses to St Mawgan-in-Pyder, a site which traverses the LIA-RB social transition and looks different to the majority of other sites of this period. St Mawgan-in-Pyder would seemingly reflect quite a different situation of community and activity at this time (see Chapter 7), albeit within a similar expression of internal built space. The enclosure at Bodrifty is different once again: a more orthodox 'settlement' and a potentially very late act of enclosure after a long period of living in a spatially more widespread, unenclosed, format. At this point it is worth considering the built space evident at Trethurgy Round. Although the main phases of occupation fall outside of the timeframe of this study, the density of built space (c. 20 percent - 40 percent) evident is similar to the enclosures above, although not all structures at Trethurgy were in use at the same time (Quinnell 2004: 176). In the model of social organisation suggested here, the enclosures above are reflective of a number of sites in Cornwall during the Iron Age that were more permanently settled (as opposed to cliff castles and some hillforts for example). Evidence from Trethurgy of mixed farming regimes and permanent residence, and the similarity in the density of built space at this site could be used to reinforce this interpretation.

The figures for Goldherring (phase 2) and Porthmeor, both courtyard house settlements situated within 'rounds', also fit within the 20 percent - 40 percent bracket. As with Bodrifty, we must envisage a slightly different combination of spatial and social relationships at these two sites; employing courtyard house settlement with enclosure. The positioning of courtyard house and non-courtyard house settlement at Porthmeor has been discussed above. The extent of courtyard house settlement outside of the round at Porthmeor, and the chronological relationship between these structures is unknown, making any more developed interpretation impossible on the present evidence.

Examining the built space for cliff castles and hillforts illustrates a different scenario again. Once again, the sample size is small, making evaluation difficult. Significant differences in the built space *within* settlement types are apparent, however. When examined contextually, the variation in the figures for built space are best explained in terms of the different uses and functions of sites within these settlement categories. At Gurnards Head cliff castle one might place an emphasis upon the seemingly seasonal or periodic nature of occupation, whereas at Trevelgue Head cliff castle, the emphasis was clearly centred upon specialist metalworking and more consistent occupation.

At Killibury hillfort, occupation was much more dense and compact than at Carn Brea; the experiences of living at these two sites would clearly have been very different. Once again there is a distinct difference in the evolution of these sites. At Carn Brea the Iron Age enclosure utilises earthworks of Neolithic date and the hillfort builders must have engaged with plenty of distinctive Neolithic material in the process. Killibury in contrast is a classic Iron Age multivallate hillfort, similar to many other Iron Age builds elsewhere. The potential differences in the roles of hillforts and cliff castles, and of the significance of their individual biographies, are discussed in further depth and in relation to their associated material assemblage in Chapter 6.

4.8.2 Discussion: the ‘built space’ percentage

Can calculations of built space be informative for British Iron Age studies? This technique has been employed in different geographical contexts, but its application to the British Iron Age remains limited (e.g. Ferrell 1997). At one level, the answer is of course, yes. Calculations of built space within ‘site types’ offers a useful means of comparison, but the interpretation of these results can only occur within a more holistic and contextual study of each site. This is quite clear when we consider the traditional premises associated underlying the interpretation of these calculations, that as the size and density of structures increase, settlements are becoming more ‘urban’, ‘specialised’, socio-politically complex and hierarchical. The Iron Age of Britain was much more complex and regional than the traditional narrative suggests (Hill 1995, 2003; Moore 2005b; Sharples forthcoming). We can no longer envisage a British Iron Age that becomes uniformly more hierarchical and urban as it progresses.

5. Spatial Analyses: Courtyard Houses

As the most spatially complex Cornish Iron Age structures, courtyard houses are considered separately from non-courtyard house settlement. The discussion below is used to further the themes introduced in the previous chapter. After initial consideration of the nature and range of courtyard house structures, I will focus on the spatial dynamics and/or material assemblages recovered from excavated examples and sites. Full details of courtyard house settlements are provided in the gazetteer (Appendix 4). Once these site-based narratives have been compared, interpretations will be offered for the origin and development of courtyard house structures and their resident communities.

5.0 Courtyard houses

Courtyard houses are geographically restricted to West Penwith. These stone-built structures are some of the most monumental constructions of the later prehistoric landscape, and are also some of the most clearly segmented. The form and composition of a courtyard house has already been introduced (see 2.4.11). The key components can be categorised as follows (see Fig. 5.0):

Courtyard

Most commonly situated at the centre of the courtyard house, with a combination of different ‘rooms’ arranged off of it.

Round room

The largest room, most frequently circular and situated directly opposite the entrance.

Circular/Oval room

Smaller, circular or oval 'side rooms' or 'chambers'.

Long room

Narrow 'side' rooms, often slightly curved or 'banana' shaped.

The components are those identified by Christie (1997)¹.

5.1 Segmentation formats

The composition and arrangement of these rooms constitute what is termed here as the "segmentation format". The segmentation format of each courtyard house has been detailed using a numeric code, following the sequence of rooms given above: courtyard, round room, circular/oval side room and long room. For example, the numeric code 1111 would equate to a courtyard house with one courtyard, one round room, one circular/oval room and one long room. Similarly,

¹ In addition to circular/oval chambers and long rooms, a 'bay' created within the courtyard and to the left of the entrance is also occasionally identified and suggested to have been utilised for a specific purpose, ancillary to central practices undertaken in the courtyard and round room. Christie (1997) has suggested this bay may have been covered with a lean-to roof, to form an additional shelter for livestock. This interpretation works well if the courtyard was left unroofed, as is suggested in the traditional reconstruction of the courtyard house. As has already been discussed however, the initial naming and definition of '*courtyard* houses', from which this reconstruction derives, was largely fortuitous, and current thinking now suggests that, for most if not all, a single hipped roof was used to contain these structures (Wood 1997 see Chapter 2, section 2.4.12). Furthermore, the extent to which this 'bay' is a frequent and intentional element of a courtyard house's layout is debateable. In many instances a much slighter bay appears to have been the inevitable result of the interface at which the narrow entrance passageway opens out into the larger curvilinear courtyard. As its presence within a courtyard house layout is not ubiquitous, an internal 'bay' has not been included as a defining characteristic of a courtyard house's segmentation format.

the numeric code 1234 would equate to a courtyard house with one courtyard, two round rooms, three circular/oval rooms and four long rooms.

Eighty-two courtyard houses and probable courtyard houses are listed within the SMR for Cornwall. Of these, sixty-five courtyard houses are extant with recorded details of room shape and dimension, allowing all or part of their segmentation format to be deduced with confidence. The numeric codes for these courtyard houses are listed in full in Appendix 6 and are summarised in Fig. 5.1.

5.1.1 The dataset

In most cases, a complete segmentation format was discernable from the extant remains of the courtyard house. After close inspection, the addition of an extra potential room within the segmentation format is doubtful for seven structures however (Bosigran CH2, Boswarva CH5, Carn Euny CH3 and CH4, Carnaquidden CH1, Chykandra CH1 and Chykembro CH1). Owing to the nature of the physical remains the character of these potential ‘rooms’ is ambiguous without further excavation. To minimise the amount of uncertainty and thus potential error included within the statistical analysis, these potential extra rooms have not been included within Fig. 5.1. At a further 11 sites, there are doubts over the existence, nature and/or extent of two or more rooms. These segmentation formats are listed as ‘uncertain’.

In ideal circumstances, all ambiguous structures would have been investigated. However, the situation of these structures, covered with gorse – which is effectively holding many of the structures together – makes it impossible to clarify their composition without excavation. As such, it was instead decided to develop the most reliable dataset possible from the existing records, from which, segmentation formats and spatial analyses could be determined.

Courtyard houses 2 and 3 at Trevean both have additional roundhouses attached to the outside of the structure, accessed via an external doorway. Because of their external access, these additional 'rooms' have been excluded from the segmentation formats of these structures, but they are considered in the gazetteer, and within the arguments presented below.

5.1.2 Combinations and sequences

For the fifty-four courtyard houses for which segmentation format can be deduced, format 1101 (one courtyard, one round room, no circular/oval room and one long room) is the commonest, with fifteen examples. Format 1111 (one courtyard, one round room, one circular/oval room and one long room) is the second most dominant format, present in ten courtyard houses. The remaining segmentation formats appear less frequently: 1121 appears six times; 1100 and 1102 four times each; 1120 three times; 1112, 1002 and 1000 twice; and 1103, 1222, 2140, 2030, 1211 and 2202 all once.

The two commonest formats are distinguished by the presence/absence of a single circular or oval side chamber. Following the discussion in Chapter 3, it is tempting to suggest that these formats reflect the most flexible, usable and/or appropriate combination of rooms, required by the most frequently occurring, and in this sense, 'typical' household. Current orthodoxy places significance upon the courtyard and round room as the central features of daily social practice. The frequent presence of hearths within round rooms and the fact that a greater amount of archaeological material has consistently been recovered from the round room and courtyard suggests this (e.g. Christie 1997: 11; Guthrie 1969: 13; Hirst 1937: 73-81; O'Neill Hencken 1933). However, in order to establish whether this

hypothesis is supported by the spatial analysis we need to consider the nature and frequency of the other segmentation formats.

Fig. 5.2 represents the most frequent deviations from the common forms; 1111 and 1101. These variants all deviate from the dominant formats by the inclusion or absence of a single room: always either a long room or a circular/oval side chamber. The proximity of these structures to the dominant formats highlights several issues relating to the significance of the segmentation format itself. First, this distribution implies a real significance to the combination of rooms, chosen to make up the segmentation format of a courtyard house. The fact that so many formats are within one room of complying with one of the dominant formats (1111 or 1101) strongly suggests that these dominant combinations of rooms *were* popular and meaningful, for whatever reason.

The distribution of segmentation formats highlights the unusual nature of formats such as 2140 (Bosulow Trehyllys CH3), 2202 (Treen CH2) or 2030 (Nanjulian CH1), and raises the possibility that these structures may represent something other than the dwellings of a 'typical' household. This suggestion will be examined in further detail below. Circular/oval side chambers and long rooms are the elements of the segmentation format which most frequently vary from the dominant formats; the latter (the long room) being the most frequent addition/absence. This is mirrored within the overall dataset (Fig. 5.3).

It is useful to consider the contexts in which rooms are included/excluded from the segmentation formats (Fig. 5.3). Long rooms and circular/oval side rooms appear together in nineteen of the known segmentation formats and separately in twenty-nine cases; long rooms feature on their own in twenty-three instances and circular/oval round rooms on their own in six instances. Both are absent in six cases. This would appear to imply no direct relationship between their function;

the presence of one room does not necessitate the presence of the other. One or other of these rooms *is* present in 48 of the 54 known segmentation formats (89 percent). This high level of inclusion would appear to indicate that the presence of one or other of these rooms was desirable, and raises the possibility that the functions or meanings attributed to these spaces may have overlapped to some degree.

5.1.3 Room ‘function’

Todd (1987: 171) suggests that the circular/oval side chambers ‘are present in a sufficient number of examples to prove that they served a set of functions that were common to the majority of such settlements’. As the analyses show, long rooms are, in fact, a more consistent aspect of the segmentation format. For both forms of side room, functions including the storage of tools, crops and other foodstuffs, or as animal byres have been postulated (Todd 1987: 170-171). The inclusion of animals within simple Iron Age roundhouses – seasonally or for overnight protection – has previously been postulated (e.g. Hingley 1990).

For side rooms of courtyard houses to act as animal byres, drains would be required for taking excreted material out of the interior. Examples of both forms of side room do have these (e.g. Chysauster CH1, CH9, Carn Euny CH2) indicating once again that the ‘function’ of both shapes of room may have overlapped, but that no single function dominated. The purpose of differentially shaped ancillary rooms may instead have derived, at least in part, from the nature of courtyard house construction, and in part from symbolic associations with curvilinear and rectilinear forms (see 5.3.1 below).

Clearly, in order to interpret room function, an appreciation of the material assemblage and any other features identified from specific rooms is significant.

As has been discussed, the value of this material is dependent upon the degree to which material is *in situ*, or reflects past use. The range of material found on courtyard house sites is similar between sites, be they courtyard house 'villages' or single structures (see Appendix 4). Before considering these aspects of the archaeological record, however, the statistical information will be examined to see whether segmentation format might reveal any aspects of function.

Statistics concerning the presence and absence of circular/oval rooms and long rooms have already suggested an absence of any direct relationship between their uses. However, spatial relationships are rarely this clear-cut and the high inclusion rate of one *or* other of these rooms, might also indicate that the activities taking place within them overlapped to a certain degree. This would imply that their role or function, whatever this may have been, was important to the structure of daily life within the house, and widely recognised as such. The fact that circular/oval side chambers and long rooms are the most frequently varied and flexible elements of the segmentation format would also seem to support the notion that they were not used for the central functions of sleeping, cooking and eating, but rather provided additional space for activities which supported the everyday routine (e.g. storage, food processing etc).

As the numbers of one type of room (either circular/oval side rooms or long rooms) increase within the segmentation format, the number of the other type reduce (a negative correlation, see Fig. 5.4). Although examples are few in number, this is a potential trend for courtyard houses with 3 or more circular/oval side chambers or long rooms: 1103 (Croftoe CH1), 2030 (Nanjulian CH1), 2140 (Bosulow Trehyllys CH3), and could even be a feature of other smaller formats; (2202, 1102, 1002, 1120). This correlation could be biased by the relatively small dataset, but if an actual trend, this too would appear to imply that the specific function of these two types of room overlapped to a significant degree.

Circular/oval chambers and long rooms have (by definition) a significantly smaller internal area than round rooms, which are comparable in size to smaller roundhouses of the period. This is hardly surprising considering that both circular/oval chambers and long rooms are most frequently contained within the width of the outer walls. Examination of the internal floor areas of these two rooms suggests that one or other took a more influential role in the spatial activities within the courtyard house. Table 5.4 compares the internal area of circular/oval side rooms and long rooms of courtyard houses whose dimensions are known from the SMR or can be calculated. Once again, no clear correlation between the size of circular/oval rooms and long rooms is immediately apparent, although it is noticeable that when both forms of room *are* present, one is almost always significantly larger than the other. In addition, where the dimensions of pairs of long rooms or circular/oval side chambers are known, the internal area of one of each pair is once again significantly larger than the other. This is true of both room ‘types’: both oval/circular side chambers *or* long rooms can and do perform as the largest subsidiary room within a courtyard house format. *It is the size, rather than the shape or combination of rooms, which appears to be mutually exclusive.* This trend is yet another indication that both circular/oval side chambers and long rooms can function in the same ways, or be used for similar activities.

This latter observation raises the question of *why* circular and long rooms are used alongside one another within courtyard house, particularly when both are used interchangeably and apparently for similar purposes, and when both can vary in size so greatly. Their co-existence might be explained in part by a variation in usage across space-time or could equally result from the way in which such rooms were added to the segmentation formats of courtyard houses over time (this possibility is discussed in section 5.3.1 below). However, the persistence of the rectilinear/circular/oval dichotomies should also cause us to consider other more

symbolic reasons behind their inception and role within the segmentation format (again, see 5.3.1 below).

5.1.4 Spatial summary

Before examining the associated artefactual assemblages and intra-site context of courtyard house structures, it is useful to summarise the assertions gained from a *purely spatial* review of the evidence:

- (dominant) formats 1111 and 1101 represent the most common combinations of room, and may reflect the most common or suitable spatial divisions adopted for the daily activities and routines of the most frequently occurring or ‘typical’ courtyard house households.
- the majority of segmentation formats cluster around the dominant formats, indicating their significance as a conscious and socially meaningful combination of rooms and spatial division. This in turn implies that a direct relationship between architectural traditions, spatial relations and social relationships *did* exist for courtyard house communities.
- as a consequence, segmentation formats which are notably different from the dominant formats may in fact represent variant compositions of domestic group, or have been used for a range of activities other than those of a ‘typical’ household (e.g. socially restricted and/or community based activities such as craftworking, metalworking etc).
- the position of the circular/oval side chambers and long rooms as the most frequent variations to segmentation format implies that these are in fact subsidiary to the main rooms of the house (the round room and courtyard), a common

consensus previously derived purely from limited evidence from the artefactual record.

- no relationship has been detected between circular/oval rooms and long rooms that necessitate their co-existence within the segmentation format.
- the presence of one or other or both of these room types within the majority of segmentation formats suggests that their presence and thus their role or function(s), were central to the daily activities of the household. This in turn might imply that the roles or functions of circular/oval side chambers and long rooms overlapped to a significant degree.
- where both circular/oval side chambers and long rooms are present within a segmentation format, the fact that one room is always significantly larger also supports the notion that a similar role and function could be provided by both rooms – particularly as the larger room varies consistently between both room ‘types’.
- From analyses of the segmentation formats alone, no explanation for the co-existence of circular/oval side chambers and/or long rooms within courtyard houses can be determined. Potential explanation for this may rest in part within the nature of courtyard house accretion and the adaptation of courtyard house formats, and in part from functional and/or symbolic ideologies relating to rectilinear and curvilinear forms.

5.2 Excavated courtyard house structures and multiple courtyard house sites

The remainder of the chapter will examine the spatial arrangement and material assemblages from a specific range of sites, namely those that have undergone

partial excavation and/or those sites that consist of more than one courtyard house structure ('multiple courtyard house sites'). Key trends exhibited by these sites are summarised within the discussion below. Particular attention is given toward the combinations of segmentation formats in operation at these sites (see 5.3.1), the spatial intra-site arrangement, topographical situation, and aspects of any associated material assemblages. The landscape context of these structures is also considered, as are the potential functions of long rooms and circular/oval side rooms and potential reasons behind the differential preference of these rooms at specific sites. The following summaries have only been possible from the close examination of specific sites (a gazetteer of which constitutes Appendix 4).

5.2.1 Material assemblages and courtyard house status

Only five courtyard house sites have undergone documented excavation: Carn Euny (Christie 1978), Chysauster (O'Neill Hencken 1933), Goldherring (Guthrie 1958, 1969), Mulfra Vean (Thomas 1963) and Porthmeor (Hirst 1937). The range of material recovered from the five excavated courtyard house sites does not appear to have differed greatly in terms of variety or source (see Appendix 4), a point of key significance. Furthermore, when these materials are attributed (where possible) to specific courtyard house structures, these are no obvious distinctions in the amount of cultural material or the exclusivity of cultural material, between structures. Either distinctions in the status of households were not very great, or were expressed via a different medium. Similarly, courtyard house communities do not appear to have had any greater access to exotic or materially 'wealthy' goods than non-courtyard house communities, arguing against courtyard house communities as a distinct group within a social hierarchy. The geographical restriction of courtyard house structures to the region of West Penwith also guards against such an interpretation.

Various alternative interpretations of Iron Age social structure are possible. At one end of the spectrum lies the possibility that Later Iron Age society was hierarchical, but that expressions of status and of social differentiation were not made through material culture associated with the living or the dead, or through structure type or size. At the other end is the possibility that Later Iron Age society was not hierarchical – but was instead organised via a different set of social relations. Potential alternative mechanisms are considered throughout the rest of the thesis.

5.2.2 Material culture and room function

Within debates surrounding the interpretation of courtyard house structures, the nature of, and distinctions between, the functions of circular or oval chambers and long rectilinear side rooms has always been a point of particular concern. Consequently, comment regarding these ancillary rooms is generally restricted to their differences in shape, rather than explicit discussion of their function (e.g. Christie 1997: 11).

As discussed in Chapter 3, in early twentieth century excavation reports, unhindered by any question of depositional practices or abandonment processes, interpretations of function and of engendered space have traditionally been more willingly asserted. Increasingly however, theoretical concerns regarding the oversimplistic interpretation of the spatial distribution of material culture have questioned traditional accounts concerning the functional and gendered use of space. As already discussed, recent ethnographic and archaeological studies (e.g. Cameron & Tomka 1993; Hill 1995; Nowakowski 2001) have highlighted the potential range of planned and highly organised ‘abandonment’ within the archaeological record which have served to guard us against simplistic

interpretations regarding artefact positioning and the location of social action or spatial function.

The material culture recorded from excavated courtyard house sites lacks detail regarding the absolute number and location of finds of all types and any secure stratigraphic context for these finds. Even recent excavation reports discuss only a sample of context-derived material and lack absolute numbers within the finds data (e.g. Carn Euny, Christie 1978).

5.2.3 'Main rooms' and 'subsidiary rooms'

For the five excavated courtyard house sites, the bulk of the material derived from the round rooms and courtyards, leading to their interpretation as the 'main' rooms of the structure, used for cooking, consumption, and other activities such as weaving. This is partially due to the provision of light and heat, the courtyard traditionally being envisaged as open to the air and the round rooms most frequently featuring a hearth (see Table 5.6).

The analysis of segmentation formats above also supports the suggestion that the round rooms and courtyards were the central features of a courtyard house and acted as the 'main' rooms of any structure. It has been suggested that the long and oval rooms were subsidiary to the round room and courtyard, as these were the elements of a segmentation format that were the most flexible. If one focuses upon the material contents of these 'subsidiary' rooms, no clear pattern in the nature and deposition of material is evident. At Carn Euny, for example, a single decorated pottery sherd associated with phase two (c. 300-50 BC) can be traced to long room number 1 of courtyard house 1, whilst long room 1 of courtyard house 2 was found to have been completely cleared in previous excavation(s), all traces of occupation (with the exception of a small gully), having been removed

(Christie 1978: 359). Excavation of a small recess built into the wall of this room identified the demolished lower course of an earlier wall following the same path. The structures at Carn Euny were clearly being constantly modified and re-built, sometimes to the same plans.

The second long room of courtyard house 2 at Carn Euny had also been cleared in antiquity, but some traces of occupation survived (Christie 1978: 360-361). The majority of features appear to have belonged to pre courtyard house phases of occupation, but pink hearth material, a spindle whorl and a small amount of pottery all appear to be contemporary with and/or post-date an earlier phase of the structural wall of this courtyard house. The potential long room of courtyard house 3 was also largely devoid of any occupational debris, aside from a possible hearth area and stone setting to the south which also sealed a few Late Iron age sherds of pottery and a possible posthole, partly underlying the enclosure wall close to the entrance.

Of later date but providing a useful contrast are the Roman period hearths that feature within the long rooms of courtyard houses at Porthmeor (see Fig. 5.7). These hearths are much larger than those associated with the side rooms or external chambers of the Later Iron Age structures noted above and indicate a scale of activity - perhaps 'industry' - notably different from that of before. The hearths at Porthmeor may also reflect a meaningful shift in the varying use of long rooms however. Although from the overall spatial statistics, the use and function of circular side rooms and long rooms does appear to have overlapped to a degree, the rectilinear shape of long rooms appears to have become more pronounced by the end of the courtyard house tradition when a more specific range of 'craft' activities can be associated with them – and on a larger scale than previously seen. The hearths associated with the long rooms at Porthmeor have already been mentioned, and to these we can add a large hearth associated with the later Roman

use of the rectilinear structure at Goldherring – thought to reflect the smelting of tin-ore on site (Guthrie 1969: 10-11 see Fig. 5.8).

Whilst variation in the shape of side rooms may well have been fairly minor at the beginning of the courtyard house tradition therefore – a possible result of differences in the nature of the construction and modification of courtyard house structures – by the end of the courtyard house building tradition these different shapes of side room may have gathered more meaning or specific uses or associations, becoming symbolic and distinctive elements of a courtyard house format and spatial organisation (see section 5.3.1 below).

The courtyard and side rooms of courtyard house structures could well have been used differentially over the year, without these activities leaving an archaeological signature. Activities such as storage, small-scale craft working, certain stages of crop processing and preparation (e.g. winnowing, shelling) and even sleeping, during the summer months, could have occurred with little or no evidence having survived. These activities may only have occurred occasionally, being spread across the various ancillary rooms of the structure. This impression fits with the analyses of segmentation formats, where no distinct trends between the presence and/or absence of circular or oval chambers and long rooms can be distinguished.

5.3 Multiple courtyard house structures: site-based spatial analyses

Certain trends do become clear when the composition of segmentation formats are examined on an individual site basis. Fig. 5.9 displays the combinations of known segmentation formats present at sites with multiple courtyard house structures. Only three of the eleven sites (Croftoe, Trevean, and Boswarva) have both dominant segmentation formats (1101 and 1111) present within their combination of courtyard houses. This observation should not necessarily be surprising if both

segmentation formats are regarded as representing the needs of the 'typical' domestic household however. Furthermore, all but one of the remaining courtyard house sites exhibit additional structures which adhere closely to the dominant formats, varying only by a single circular/oval chamber or long room. Of sites with multiple courtyard house structures, 19 of the 43 known segmentation formats present are dominant formats, but 34 of the 43 known segmentation formats are within a single room's difference to the dominant segmentation formats.

5.3.1 Distinctions in room shape

Consideration of the spatial dynamics of circular/oval chambers and long rooms provides a potential explanation for their differing shape. Table 5.5 lists sites for which the dimensions of circular/oval chambers and long rooms are known and from which their internal floor areas have been calculated. Within this selection, four sites demonstrate evidence for the process of 'courtyardisation' (Bosigran CH 2, Bosporthenis CH1, Croftoe CH1, Greenburrow), whereby pre existing structures are incorporated within a courtyard house format (Ashbee 1974, see 5.4.2 and Fig. 5.10). In most instances this pre-existing structure becomes the 'round room' of the courtyard house. However, in one instance below, at Bosigran (CH2), one of the circular side chambers was also integrated into the segmentation format via this process. In addition, at Bosporthenis (CH1) the long room was added to the courtyard house format at a later date, a process termed 'accretion' (see 5.4.2 below).

From the limited information, processes of courtyardisation and accretion can be identified at fifteen sites. The four cases listed (Bosigran CH2, Bosporthenis CH1, Croftoe CH1, Greenburrow) are the only instances for which room dimensions are also known however, and in only two of these cases can the

dimensions be attributed to the 'courtyardised' or 'accreted' rooms with any confidence. Evidence for courtyardisation and accretion is at present, limited (see 5.4.2), but this would appear largely due to a lack of detailed survey at courtyard house sites. It seems likely that courtyardisation, and the accretion of rooms into an existing courtyard house format was a fundamental aspect of courtyard house development, much more widespread than current evidence suggests (see discussion below).

Comparing the two cases where an internal floor area can be related to a 'courtyardised' or 'accreted' room, the internal area of the 'courtyardised' round room is significantly larger than the long room, gained via the process of 'accretion'. Although no interpretation can be derived simply from these two examples, one possible cause for the synchronic use of circular/oval rooms and long rooms concerns floor area. If choosing to add a room to a pre-existing courtyard house structure (accretion), the only way to provide additional space within that room, once the depth of the wall has been reached, is to expand in width (see Fig. 5.10a). If a larger internal area was required when adding a room therefore, the eventual result would by necessity, lead to the construction of 'long rooms'. Circular or oval chambers, when built into a pre-existing courtyard house format, have a limit to the amount of internal the total floor area achievable before their shape becomes compromised, and they are effectively turned into a 'long room' (see Fig. 5.10b).

However, if circular or oval chambers are present within a courtyard house format via the process of courtyardisation, this allows for a potentially much larger internal area to be achieved (see Fig. 5.10b), as is the case with CH2 at Bosigran. The only circular/oval chamber known to be larger than that of CH2 at Bosigran is that of CH1 at Carne. No documented survey has been undertaken at this site and it is impossible to tell whether process of courtyardisation or accretion operated here. However, the SMR states that 'there is some dispute as to whether

the site is a courtyard house or (a series of) hut circles', which increases the likelihood that this courtyard house structure was indeed created via a process of courtyardisation. Thus, is the composition of differently shaped side rooms within a courtyard house format a result in part of the relationship between the space required within the room and the nature of the courtyard house structure's architectural development?

This interpretation might explain the initial concurrence of circular/oval side rooms and long rooms. Long rooms are the practical result of a requirement for a greater amount of space, when adding rooms to a pre-existing courtyard house through a process of accretion. This proposition does not however, explain why long rooms and circular rooms co-exist within and between courtyard house structures which appear to have been built in a single event. Whilst the explanation offered above might identify a functional reason behind the concurrence of circular/oval chambers and long rooms at some courtyard house structures, other ideological and/or practical motivations must have also developed for the distinction of these two room styles. Could this ideological and/or practical distinction have evolved in part from the traditions of architecture associated with the earlier Iron Age - in the circular 'roundhouses' associated with daily domestic activity and the rectilinear 'four posters', thought to have been associated with the storage of surplus cereal stocks and/or the excarnation of the dead?

Secondly, the presence and addition of different side rooms in a courtyard house must also be considered in terms of the desire, formally, to segment and subdivide space. This is clearly an issue in the construction and modification of segmentation formats, and is perhaps most clearly seen in the division of long rooms into separate chambers, as described below. It was the ability to make space more flexible, to subdivide and use the power of spatial inclusion and

restriction, which appears to have been significant to courtyard house communities.

5.3.2 Room division

A significant feature of several long rooms is their internal subdivision, often having occurred at a later date to the room's construction. Long room 1 of courtyard house 1 at Carn Euny was partitioned at its north-western end with two stones, enclosing an area *c.* 1 metre square. The depression for a third stone was situated in front of this partition, and together these stones are interpreted as room 'furniture' (Christie 1978: 351). It is unclear what this central stone may have actually been for, but its situation directly in front of the gap between the two extant stones suggests it related to the purposeful division or partition of the room itself (see Fig. 5.11). Long room 2 within this structure also has a partition at one end, which once again encloses an area at the very back of the room, *c.* 1 metre square². In other examples the subdivision is more even, dividing two rooms of roughly equal measure, and accessed via separate doorways (e.g. Boswarva CH3).

5.3.3 Segmentation

Of all the Iron Age structures in Cornwall, courtyard houses represent the most formalised demarcations of segregated space at a household level. The physical construction of separate rooms within a household reflects a considerable shift in the spatial recognition of relationships both within the household social structure, between communities of multiple courtyard house structures, and in the relationships with visitors from outside the communal group.

² The back wall of long room two has been moved further back in recent years, making this enclosed space larger as a result.

A distinction between 'public space' and 'private space', in the distinction between the initially accessed 'public' courtyard and the 'private' rooms accessed beyond this, could potentially be inferred, drawing from similar spatial divisions expressed for other Iron Age structures (e.g. Foster 1989; Hingley 1990) and from more general spatial theory and application (e.g. Hanson 1998; Hillier 1996; Kent 1990b; Parker-Pearson & Richards 1994a). The use of binary oppositions in this way has received rightful criticism for being simplistic in the representation of spatial relations however and, with the fluidity of action apparent between rooms of courtyard houses, and variations in the ease of access of view and movement to different rooms of the segmentation format (see below), a binary division between 'public' and 'private' space would seem particularly naive for the degrees of segmentation experienced within courtyard house structures. It would be better perhaps, to reflect upon grades of privacy and/or publicity, and of formalities of movement and action, both within and between the courtyard, and the rooms beyond, dependent upon the nature of the individuals involved and context of the experience or action.

This shift in the recognition and use of space will be placed within the broader context of social transformations during the Late Iron Age in Chapter 7. Crucial to this recognition of space, however, is the way in which courtyard houses, through the processes of courtyardisation and accretion, became a physical and visible manifestation of the dynamics of household structure, and of changes in the personal relationships of the household. These processes are examined in greater detail below.

5.4 Courtyard house chronology, accretion and courtyardisation

5.4.1 Chronology

Before looking at the absolute chronologies for courtyard houses in Cornwall, their relative dating must first be considered. The possibility that not all of the courtyard houses at a single site were contemporary seriously affects inferences concerning the relationship between courtyard house format, position and phasing, and household and community dynamics. However, from the excavated evidence, this would not appear to be a significant trend; the dates for occupation of excavated structures at individual sites being broadly contemporary.

At Carn Euny certain early structures may have gone out of use before others, but these structures remained extant (e.g. House J). In addition there is no evidence for the deliberate infilling of courtyard houses, as is occasionally seen at other Middle-Late Bronze Age and Iron Age settlements (e.g. Jones 1998-9; Nowakowski 1991, 2001; Whimster 1977: 65-70). If specific structures within a settlement did fall out of use therefore, they remained standing, as monuments to the site's history, leaving open the possibility of secondary use or sporadic re-use in ways that can be archaeologically difficult to detect (i.e. storage, temporary enclosure of animals etc).

Addressing the absolute chronology of courtyard houses and of changes in spatial format over time is problematic due to the lack of excavated sites. Only a few sites have dates for occupation and even fewer have a discernable site chronology with distinct structural phasing. The five excavated sites however, would appear to indicate a *central* period of occupation running from the 1st century AD –3rd century AD. Carn Euny is the only site to demonstrate courtyard house occupation during or prior to the 1st century BC (see Fig. 5.12 and gazetteer), but there is a small but compelling amount of evidence that further indicates the

origins of courtyard house occupation prior to the Roman invasion of Britain in 43 AD.

Current consensus follows Quinnell's (1986: 120, 2004: 188) contention that courtyard houses have been *demonstrated* to belong to the Roman period rather than the Iron Age. Despite the apparent certainty of this statement, evidence for the dating of courtyard house structures remains open to debate. Quinnell's proposition is based upon two crucial readings of the archaeological evidence. The first concerns the security of the stratigraphic relationship of South Western Decorated wares at Chysauster and Porthmeor. These are assumed to derive from non-secure contexts and as such could relate to settlement prior to the construction of the courtyard houses at these sites. At Porthmeor, the courtyard houses do indeed sit within the banks of an earlier round, but at Chysauster structural evidence for earlier settlement has not yet been found. Secondly, the long-lived forms of cordoned wares, found at Carn Euny and Mulfra Vean, which originate in the 1st century BC and continue throughout the Roman period, are assumed to all be 'late' examples, post dating the end of the Iron Age (Quinnell 1986: 120).

On the basis of these two plausible arguments, the case for courtyard houses as a purely Roman phenomenon appears convincing. However, this does not adequately explain the additional evidence for Iron Age activity at several sites, or the Late Iron Age context from which some of these courtyard house settlements clearly derive. The *majority* of courtyard houses may indeed date to the Roman period, but the evidence suggests the origins of courtyard houses rest firmly in the 1st century BC and possibly earlier. Firstly, returning to Chysauster and Porthmeor, there is no obvious reason to doubt the validity of the Iron Age contexts from which South Western Decorated wares were recovered. The reports of both excavations, undertaken in the 1930s do, admittedly, lack certain detail. However, whilst the likelihood of contamination or residuality from earlier

settlement contexts at Porthmeor cannot be ruled out, the current absence of any earlier recorded settlement at Chysauster makes the argument for contamination less convincing.

The case for the Late Iron Age development of courtyard houses does not rest purely upon ambiguities within the pottery chronologies and excavation standards. Several unexcavated courtyard houses have produced stray finds of Iron Age date: pottery (both Iron Age and Roman), fragments of Iron Age stone artefacts (e.g. Boddinar Crellas), and an Iron Age glass bead (e.g. Crankan) for example, too many for these all to be coincidental. Equally, although none of the settlement structures at Bosulow Trehyllys have been excavated, a transect through an earth and stone lynchet which runs through the settlement and into what is now the neighbouring field beyond was excavated by the Cornish Archaeological Unit (see Fig. 5.13) and produced Late Iron Age South Western Decorated wares (Herring pers. comm.). As at Porthmeor, the presence of single circular structures amongst the courtyard houses at Bosulow Trehyllys could represent earlier, pre-courtyard house occupation to which the Iron Age material recovered from this site related. Many courtyard house sites display a combination of courtyard house structures and single circular structures and, as part of the orthodox consensus these are thought to reflect earlier, Iron Age occupation. However, it is the context and use of these structures which, when combined with the artefactual evidence, draws the foundations of courtyard houses back into the Late Iron Age and indicates a more complex relationship than the simple Late Iron Age/Roman division currently suggested.

5.4.2 Courtyardisation and accretion

The process of courtyardisation has been described in part, above, but as an observation of courtyard house development, this process appears to have been

largely ignored within the published discussion (e.g. Quinnell 1986, 2004; Todd 1987: 172). The term 'courtyardisation' has been taken here from comments included within the SMR for Cornwall and from the discussion of Nonour, in the Isles of Scilly, by Ashbee (1974).

'Courtyardisation' describes the process whereby pre-existing circular structures are joined or incorporated into a courtyard house structure, discernable in the situation and integration of walling. This process should be distinguished, where possible, from the 'accretion' of rooms on to an already existing courtyard house format, whereby an existing structure is modified to include or incorporate an additional room.

Based on excavation and survey, seven courtyard houses (Bosigran CH2, Bosporthennis CH1 and CH2, Croftoe CH1, Greenburrow CH1 and Nanjulian CH4 and CH5) demonstrate evidence for courtyardisation. At Trevean, CH1 and CH2 had existing circular structures attached to the outside of their round rooms which continued to be accessed externally. In addition, six courtyard houses (Bosigran CH2, Bosporthennis CH1 and CH2, Chysauster CH6 and potentially Croftoe CH1 and Greenburrow CH1), demonstrate evidence for the accretion of additional rooms over time. At Bosporthennis and Bosigran the accretion of rooms could be seen as a continuation of the courtyardisation process which formed the initial structures. It should also be remembered that only a small number of courtyard house sites have undergone recent survey and many sites are so damaged that the ability to identify with any confidence evidence of courtyardisation or accretion, is markedly reduced. As such, this evidence for courtyardisation and accretion should probably be regarded as an indication of a much wider process.

5.4.3 Origins

The courtyardisation process is hugely significant in understanding the origins and development of the courtyard house and has wider ramifications for the transition from Late Iron Age to Roman society in Cornwall. Within traditional culture historical paradigms, the presence of courtyard houses marked the presence of a distinct people, with distinct cultural traits which were reflected in the segmentation of their living space and, a little more curiously, in a dislike for steps:

‘...as far as is known, steps were avoided by Court-yard House folk,
who preferred paved slopes’

(Hirst, 1937: 31).

In terms of the current consensus courtyard house structures are still being used to demonstrate the ‘arrival’ of Roman control and influence in Cornwall, and the first phases of ‘Romanisation’ amongst a supposed elite (e.g. Quinnell 1986). In this way, the current interpretation of courtyard houses differs little to the culture-historical model: the direct imposition of a ‘people’ being substituted for a rapid switch, from an Iron Age society to a new ‘Romanised’ culture.

This viewpoint, I would suggest, is the result of two factors. The first is the apparent absence of evidence of change within the material and settlement records of Cornwall in the years following the Roman invasion of Britain. This has created a need and desire to ‘pin-down’ the onset of the Roman period, and the evidence for courtyard houses has been manipulated to signify this ‘arrival’. Secondly and more fundamentally however, with a few notable exceptions (e.g. Sastre 2002), is an absence of theoretically aware methodologies with which to interpret the social changes that occurred within the Atlantic provinces of the Roman Empire, during the Later Pre-Roman Iron Age and early Roman periods.

The current interpretation of courtyard houses (e.g. Quinnell 2004) rests firmly within very traditional views of the 'Romanising' process, whereby local native communities actively embraced a more 'Roman' way of life (but see Creighton 2001; Mattingly 2004, 2006; Millett 1990; Webster 2001; Woolf 1998 for up-to-date reviews and alternative discussions of the 'Romanising' debate). However, when courtyard houses are considered as an essentially local development whose foundations originate primarily from pre-existing Iron Age settlement and social structures, the identity and motivations of inhabitants become more complex. The recognition of the courtyardisation process is crucial as it acknowledges the significance of the local social context that drove the narrative of cultural change, during the Late Iron Age – Roman transition, reflected in part by the development of courtyard houses. The case made within the gazetteer (pages 396-398) for the site of Carn Euny as a 'transitional' courtyard house settlement with 'embryonic' segmentation, is also important.

Accretion, whereby additional rooms were inserted into the existing wall of a courtyard house structure, is also extremely telling with regard to the nature of the social structure of courtyard house communities. By adopting a method of segmented space whereby space was segregated within the enclosing circuit of the courtyard house and around a fixed central area, rather than segmented within a single central area (as partitions segment space within a standard roundhouse), additional space could be gained in the reworking of sections of the outer walls of the courtyard house (see Fig. 5.14). This process is most clearly seen within the accretion of rooms at Bosporthenis and Bosigran (discussed within Appendix 4), but might also be seen in the situation of externally accessed rooms or structures attached to the outside walls of courtyard houses (Trevean CH2, CH3, Croftoe CH1 and potentially Carnaquidden CH1) and in the division of long rooms discussed above (Boswarva CH5, Carn Euny CH1).

These processes indicate a very real and continuing concern with the segmentation of space. Although this may in part have related to the demarcation of specific rooms for specific activities, this is not overly apparent within the material culture, visible within the archaeological record. The provision of additional segmented space, and further subdivision of this space was also related directly to the spatial manifestation of personal relationships within the household. To this degree, although no overt 'hierarchy' is apparent between courtyard house communities, it could be argued that social stratification, drawn from various distinctions in personal identity and affiliation, were operational within individual households. Increasing formality of space within the domestic sphere has, within other social contexts, been argued to be the product of increasing social distance between inhabitants (e.g. Kent 1990a, Samson 1990a, 1990b). The extent to which this could be true for courtyard house inhabitants is discussed further below and at length in Chapter 7.

The accretion exhibited by CH6 at Chysauster reflects a different process of accretion to that of the more normal addition of a single room as it involves the attachment of a second courtyard house structure, forming a semi-detached unit with two courtyards, both of which have side rooms and separate main entrances (see Fig. 5.15). At Chysauster CH6, it is clear that the southern unit preceded the northern unit, which was a later addition. 'Semi-detached' courtyard houses with two distinct house units do also appear elsewhere (Croftoe CH3, Treen CH2 and possibly at Boswarva CH1 and Nanjulian CH1), but a lack of excavation at these sites means that no relative chronologies can be discerned. It may well be that most reflect a two phase process whereby one house was added to the other, rather than both being constructed in the same event.

Courtyard house 2 at Bossulow Trehyllys should be considered as distinct from the 'semi-detached' houses discussed above. This courtyard house structure had a single courtyard, with a suite of side rooms and separate round rooms on each

side (see Fig. 5.16). Weatherhill has suggested that this structure may also have been ‘designed for two families’ (SMR 30446.02); although this structure is more likely to have been built as a single event.

The impression gained from the evidence above indicates that courtyard house structures allowed for a degree of fluidity of household size or social dynamic over time. The addition of household members and changes within familial identities – of an individual’s role, position or status within the group for example – may have required changes to house form or layout and increases in the segmentation of and/or amount of household space. In certain instances the addition of externally accessed rooms may relate to new requirements in subsistence practices, additional shelter for livestock or areas for the processing of animals and/or crops, for example.

A more formal and structured segmentation of space allowed these social dynamics and routines to be lived and expressed, both physically and visibly to household members and to other households within the community, through physical alterations to the internal and external structure of the courtyard house. In the construction, expansion and remodelling of a courtyard house’s form, the physical definition of a household; the walls that literally and symbolically defined it, could chart the household’s history and continual development. To this extent, the courtyard house structure could have been viewed as a visible and physical document which was both created by, and outwardly portrayed important events resulting in alterations to the social relations of the household and household identity.

When considered in relation to household relations as well as household activities, the process of accretion would appear to relate more directly to the shifting components of a household structure and the negotiation and demonstration of changing personal relationships which may have accompanied these changes in

household composition. The courtyard house was thus an active medium in the construction, transformation and reproduction of household relations and identities as well as being a visual conveyor of these relations, both to members within the household and perhaps more crucially to visitors, from courtyard house communities and beyond.

The ability to offer a more formal framework through which social relations could be managed between groups or individuals who were not necessarily familiar with one another, may have been a particularly important strength of the courtyard house form. This would have been of particular importance if the changes in household dynamics were relatively frequent – associated with the seasonal movements of particular members of a household and/or the temporary agglomeration of different household members as part of seasonal or transhumant events, for example. The fluidity of group composition in the annual transhumant practices of communities and their livestock has been well documented ethnographically, with complex consequences for individual and group identities (e.g. Galaty and Johnson 1990, Kavanagh 1994: 66, Sperling and Galaty 1990: 74-75). In situations of frequently changing household compositions, the formal recognition of spatial and thus social relations would have been important to convey - for everyone's benefit. If cliff castles and some hillforts were being used intermittently as part of seasonal movements as argued above (see 2.4.4 and 2.4.10), the composition of household members in round and courtyard house communities may also have varied to a degree, as a result.

5.5 Anomalous segmentation formats

The recognition of such a close relationship between the segmentation formats of a courtyard house and the social relations of the resident household has interesting implications for those structures exhibiting unusual segmentation formats. Some

of these structures, such as Bosulow Trehyllys CH2 (1222) and Chysauster CH1(i) – discussed above – have been interpreted in terms of growing family numbers or the convergence of two households.

However, the segmentation of certain structures still appears ‘unusual’ (e.g. CH3 Bosulow Trehyllys (2140), CH1 Nanjulian (2030) and CH2 Treen (2202)) and require further interpretation. In the gazetteer (Appendix 4) it is proposed that their room composition indicates a role outside of that of a more ‘typical’ house used for the everyday activities of a household. To this extent, courtyard house structures with anomalous formats and which appear to have a bigger emphasis upon the ‘main rooms’ - courtyards and round rooms - over side rooms, could have performed as centres for the collective gathering of the community, possibly in addition to housing certain individuals.

Equally however, the variations in segmentation format displayed by these structures could relate to a variation in social expression, of the general principles of space represented by a courtyard house structure. In questioning these smaller scales of variation within otherwise ‘uniform’ groups of monuments, Barrett (forthcoming) has proposed that such variations reflect the primary condition of architecture as mechanisms of human perception, of social conditions and a world view, rather than as a means of communication of this world view, which by its nature is inherently contextual (see 5.10 for further discussion).

5.6 Spatial orientation

An examination of the orientation of courtyard house entranceways was undertaken, in part to place the evidence for Cornwall within the continuing debate concerning cosmology. This examination is also intended to develop the initial observations discussed above, relating to the situation and orientation of

courtyard houses within their groups, and the development of spatial paths and communal outlooks produced as a result. The situation and orientation of specific room types around the courtyard was also examined for any trends which may relate to the negotiation of space and spatial relations.

5.6.1 Entranceway orientation

A review of the entranceway orientations of known courtyard houses with extant wall foundations was undertaken by Wood (1997). Her study examined 43 courtyard house structures and the orientations noted are shown in Fig. 5.17. Using this study as a basis, a comparative study of the orientation of courtyard house entranceways was undertaken. The results are displayed alongside Wood's (1997) data in Fig. 5.17. By using data from the SMR and from published plans and reports, the total dataset for Cornwall is larger and of a different composition to that recorded by Wood. The larger body of data raises concerns regarding the reliability of both datasets. The entrances of courtyard house structures can be difficult and/or impossible to detect at sites which have deteriorated over the years or been subject to alterations and re-use by later communities (e.g. CH3 at Chysauster, used for Methodist preaching in the later nineteenth century). Bracken and gorse frequently make the identification of rooms and entranceways impossible. This vegetation is 'holding together' many of these structures and as scheduled ancient monuments any alteration to their extant state is prohibited.

The data taken here from the SMR was made more secure by omitting any instances where the presence of an entrance or the direction of an entrance was in doubt (e.g. "entrance *likely* to face south-west"). Equally, where SMR records could be checked against plans of the site, the details have proven reliable. In addition, orientations were often recorded for entrances and rooms which may

have subsequently deteriorated, disappeared and/or become indistinct, and had thus been left out of Wood's (1997) study.

Although the number of orientations recorded here from the SMR only differs by a figure of 2 from those compiled by Wood, the composition of these data is slightly different implying that entrance orientations at some structures were included by Wood and not included within the SMR and vice versa. Consequently, a more representative impression of the orientation of courtyard house entranceways might be gained by combining the results of both studies. This is by no means a perfect solution, but without further details of the methodology used by Wood to compile her dataset, any integration of the two datasets is impossible.

From the data gathered from plans and the SMR, a particular favour for orientation to the east/south-east/south is shown, as well as to the west. This is mirrored, to a lesser degree, in Wood's dataset, although the significance of a westerly orientation is not a feature of her data. A smaller proportion of structures recorded within the SMR orientate to the south-west and north-east, and to the north and north-west, although these are the least favoured aspects. Within Wood's data, no structures orientate to the north or north-west, but the figure for structures orientating to the north-east is higher than that indicated by the SMR.

The entranceway orientations for courtyard houses can also be compared with those of non-courtyard house structures (LIA, LIA/RB and RB period structures only, in order to make sure they are chronologically comparable to courtyard houses). This comparison is shown in Fig 5.18. Although the numbers used for comparison are relatively small, the overall distribution of entranceway orientations is broadly similar.

5.6.2 Room orientation

The orientations of each type of room, in relation to site north, are shown in Fig. 5.19. No clear arrangement for specific rooms around the courtyard is immediately apparent. If this had been the case, the dominant positions of specific rooms would be mutually exclusive, but they are not.

Traditionally, the round room and entrance are regarded as the most stable features of a courtyard house, and are invariably described as being situated directly opposite one another. This assertion is supported in the data above, albeit to a less prominent extent than current orthodoxy implies. A high number of round rooms to the north, for example, are matched by a notably low occurrence of entranceways, and this relationship is reversed in the south, and more distinctly in the south-east. However, the clarity of potential relationships is made confused by other variations in the location of round rooms, entranceways, and 'side rooms'. Furthermore, the inherent partiality of the dataset makes any conclusions at this scale inherently unstable. What is clearly apparent however is a greater variation in the locations of rooms, particularly the side' rooms, than is currently described within the literature (e.g. Todd 1987: 170; Weatherhill 2000: 21-22).

If the dataset is broken down further, and grouped by segmentation format, the orientational exclusivity of specific rooms and entrances becomes more distinct (see Fig. 5.20 and Fig. 5.21). A degree of variation in the layout of rooms and entrances is still apparent however, and no clear trend in room orientation is evident. When compared on a structure by structure basis (see Appendix 8), the overall impression is still of a wide variety in room orientation.

Trevean is of particular note when examining the orientation of different rooms. This site shows a clear preference for a layout of room types within each courtyard house structure, and this layout is distinctly different from the

‘orthodox’ composition. The clearest variation is the situation of the round room adjacent to the entrance, rather than directly opposite (see Appendix 4). Trevean is an explicit example of a trend of localised, site-based variations in room composition and layout that are exhibited by all courtyard house settlements. Indeed, although in many respects courtyard house sites appear to mirror one another in outward appearance, the small-scale variations observable from the analyses above suggest that site-specific variations in the composition and layout of courtyard house structures is the most prominent unifying theme. These outwardly ‘coherent’ courtyard house structures display complex individual variations internally, and the ability for these structures to appear uniform at one level and yet to allow local personalisation or ‘difference’ at another, may be the key to their favour by courtyard house communities. As discussed above, courtyard house communities appear to organise themselves along the lines of their local social group or ‘village’ – often comparable to, or slightly larger than the number of households thought to be reflected by a ‘round’. Thus, two different scales of identity – the first reflected by the group of ‘courtyard house structures’ and the second by the localised manipulation of space within individual structures – could be seen to appeal to the nature and social reproduction of courtyard house communities. In short, the courtyard house structure can be regarded as the key reflexive aid to the mechanisation of identity and social relations within courtyard house communities.

A similar argument has been employed by Woolf (2005) with reference to Roman columns of Jupiter. Woolf argues that part of the appeal of the column of Jupiter, examples of which were erected in northern provincial towns of the Empire, was the provision of a formal section of the column intended for decoration or elaboration of locally important motifs in local styles (see also Woolf 1998: 236-237). It was the ability to personalise these monuments that made them significant to their communities, whilst still allowing them to unite in a broader, overarching identity, through the erection of the column of Jupiter itself. This argument

dovetails well with Barrett's suggestion (above) that such monuments should be regarded as documents of perception – the perception of a broader world view and of a community's position within this (Barrett forthcoming).

If similar arguments are related to courtyard house structures, their construction and occupation can be regarded as having been of great significance to the identities and relationships of their inhabitants. I have argued that the ability for courtyard house structures to be adapted and modified as the composition and social dynamics of the resident households changed, invested a degree of household identity within the very fabric of courtyard house walls. This was arguably more prominent given the visual scarring of these changes, observable on the outer walls of a structure. Furthermore, the ability to personalise and individualise the layout of a courtyard house is argued to have provided the ability to offer a very personal take or 'perception' of a wider social understanding, reflected by the courtyard house form in general. The small-scale nature and organisation of courtyard house communities, it is argued, both favoured and was reproduced through a formal structure which enabled this degree of local choice and variation at household and site level. The nature of courtyard house communities and courtyard house structures went hand in hand, mutually reproducing and adapting one another, each being a unique perception of a broader social identity which had at its core, a significance and priority given to the maintenance of smaller-scale household identities.

5.6.3 Spatial relations: controlling visual access and movement

The nature of courtyard house segmentation formalises the ability to see, hear and move within the space of the structure. Physical and visual access to the space and rooms around the courtyard house is restricted. This may have also been the case with partitioning used within other forms of roundhouse structure, but the

segmentation within courtyard houses, enshrined within the fabric of the walls, reinforces the division of space from the courtyard to a much higher degree than is seen anywhere else in southern Britain at this time.

A free view and access to all areas of a domestic space offers a signal of acceptance (Kent 1990a). By restricting view and access, inequalities of power are maintained, particularly between household members and visitors from outside the social unit: the power and control of the unknown - but manifest at a local scale (see Helms 1988). This inequality of power would have been reaffirmed with the everyday routines of household members, and with the repetitious movements of each visiting guest. Similar spatial relations have also been suggested for the Romano-British villa (Scott 1993). This mysterious and restricted space was not simply an aspect of the dark and shadowy side rooms. Examination of the plans available indicates that, when the round room is situated opposite the entranceway, a direct line of view from one to the other is not always available, due to the position of the doorway to the round room which is not always aligned with the entranceway to the structure (e.g. Chysauster CH1, see Fig. 5.22). In addition, a room other than the round room is occasionally situated directly opposite the entranceway (e.g. circular/oval chambers at Chysauster CH9, Bosulow Trehylls CH2, long rooms at Trevean CH2, Try CH1, see Appendix 8). Despite the overall variation in courtyard house layout however, round rooms are more frequently than not, situated in direct opposition to the entrance, creating a central axis to the structure, and a direct line of view from the entrance through to the back of the round room (see Fig. 5.23).

5.7 Parallels to the courtyard house

By far the most similar parallel to courtyard houses are 'figure-of-eight' houses, such as the four discovered in 1992 at Bosta Beach on the small island of Great

Bernera in the Western Isles (Neighbour & Crawford 2001) and dated to the 6th-8th centuries AD. Similar structures of Pictish and Viking date have also been excavated on Orkney (Ritchie 1976). Both courtyard house structures and 'figure-of-eight' houses are roughly oval, built from a double wall with internal core material, and both have long entrance ways which lead into a central room, directly off of which is a smaller circular room, situated directly opposite the entrance passage. Both also have side chambers (see Fig. 5.24 for comparison). Additional comparisons can be made with simple and complex 'Atlantic roundhouses' of Scotland (Armit 1990). One of the earliest precursors to this form of cellular structure is that of Jarlshof in Shetland, earlier phases of which display striking similarities to courtyard houses, albeit on a smaller scale (Fig. 5.25). These earlier phases at Jarlshof originate an entire millennium earlier than the first evidence for courtyard house structures in Cornwall.

The localised variations and temporal scope represented by the comparisons discussed above raise significant questions concerning the reasons behind their resemblance and 'inception'. Rather than being of direct influence or imitation, each of these structures could actually be interpreted as evolving in relative isolation. These stone built segmented structures could be regarded as the inevitable result of a particular combination of local social developments - which resulted in new concerns surrounding the formal segmentation of space and spatial relations - and the social and environmental possibilities and constraints effected by a primarily seaboard outlook and contacts. This possibility is supported by occurrences of similar looking structures to courtyard houses in other geographically and/or temporally remote places, such as Egypt (Wilson pers.comm.).

In other words, the similarities between 'courtyard houses', 'figure-of-eight houses' and 'Atlantic roundhouses' may be best explained not in terms of 'influence' but rather in terms of a temporal coincidence of shared social

developments, analogous seaboard outlook, and consequent environmental conditioning, that manifested themselves in an inevitably similar range of architectural traditions. This notion has important consequences, not only for the concept of 'western Atlantic identities' in the Iron Age, but also more specifically to the interpretation of courtyard house design, particularly in light of the fact that the closest *contemporary* parallels to courtyard houses are actually found in Italy (see below).

5.8 Social relations of the Italian atrium house

Although similarities between courtyard houses and other structures have been noted (above), it is suggested here that a significant contemporary parallel is that of the Roman 'atrium' house (e.g. Clarke 1991; Tomlinson 1995; Wallace-Hadrill 1997). The layout of a courtyard house, with secluded 'private' rooms arranged around a 'public' central courtyard, displays a marked conceptual similarity to the layout of an early atrium house, evidence for which is taken from ground-plans from the 3rd century BC recovered at Pompeii and from Vitruvius' *De architectura* written in the twenties BC (see Clarke 1991: 1-12). A traditional 'atrium' house and a standard Cornish courtyard house are compared in Fig. 5.26. Marked similarities include the long entrance passageway (for the atrium house, this was called the '*fauces*', literally translated as 'jaws'), a central room ('*atrium*'/'courtyard') and a smaller room situated opposite the entrance way (the '*tablinum*'/'round room').

For most Roman atrium houses, the centre of the atrium was only partially roofed, with the very centre left open to the sky. This design enabled rain water to be funnelled down, through the central space, to a rectangular pool in the centre of the floor of the atrium (the *impluvium*). However, recent re-evaluation of early excavation reports from several atrium houses indicates that the earliest phases of

these structures did not have a rectangular pool, making these first structures even more comparable to a courtyard house structure (Wallace-Hadrill 1997). In some atrium houses the floor of the tablinum was also raised, helping to physically distinguish it from the central atrium. Similarly, certain rooms are also sometimes raised within a courtyard house's format (e.g. the long room and circular/oval chambers in CH1(i) Chysauster).

Within atrium houses, these architectural elements (the raised tablinum, central impluvium and elongated fauces) helped to create a central axis of view and movement within the structure, the main focus of which was the tablinum, or perhaps more precisely, the people framed within it (see Fig. 5.27). The walls and sloping ceiling of the entranceway, the columns of the atrium and the location of the rectangular pool, all directed focus upon this location. This main axis was key to the spatial organisation and spatial relationships which operated within the structure. The highly structured space of the atrium house, some argue, was used to control and dictate relationships of power enacted within these boundaries. The significance of the central axis relates to a social ceremony called the '*salutatio*' (Clarke 1991: 4-6), whereby the head of a household was visited by various dependents who arrived to reaffirm their allegiance to their patron, ensuring the continued maintenance of a patron's patronage and consequently, economic and political security. These dependants may have included members of the patron's extended family or members of his staff and/or slaves.

The design of the atrium house aided the performance of this relationship by structuring the view and movement of the ritual, framing and sometimes elevating the patron and his close family, who would have sat or stood in the tablinum as they waited to meet their visitors. In addition, the subservience of the visiting clientele would have been expressed via the stepping away from the main axis in order to pass around the rectangular pool in the atrium and greet the patron. The architectural control of space within the atrium house encoded a strict set of social

relations that facilitated a complex hierarchy. The focus of social power was directed to the head of the resident household, 'facing all who entered through the fauces...(the patron)...controlled the boundaries of his house' (Clarke 1991: 6).

5.8.1 Courtyard houses and atrium houses: a meaningful comparison?

Although the inception of courtyard houses in Cornwall postdates that of Roman atrium houses, their co-existence during a time of Roman expansion might lead us to ask whether their spatial similarities indicate shared ideals and spatial values. However, structures of similar layout and plan to courtyard house structures are present elsewhere along the western Atlantic seaboard, from distinctly different periods of time. This evidence has been used to suggest that the form of courtyard house layout and structure derives in large part from a common response to a particular set of social circumstances and environmental situation and particular range of natural resources. A direct influence or knowledge of architectural form is not necessary for the evolution of a structural layout similar to the Cornish courtyard house, Italian Atrium house or medieval 'figure-of-eight' house from western Scotland.

Having said this, the close temporal proximity of the Italian Atrium house and the Cornish courtyard house, and the potential interaction of their associate communities through trade and contacts at this time, may mean that the co-existence of these structures was not entirely unrelated. Cornish courtyard houses are notable in their present distribution for being located close to lodes of natural tin and gold. If, as will be argued below, mineral extraction and trade and exchange in the Later Iron Age of Cornwall was again organised primarily along the lines of the extended household and small social group, courtyard house communities may have developed very specific and discrepant sets of relations with other communities from Iron Age and Roman Europe, which were different

from the contacts of neighbouring communities in Cornwall who were trading different resources and using different sets of trading relations.

If the scenario above is accepted as possible, it becomes easier to understand why courtyard house structures, so different from neighbouring architectural traditions, evolve in certain parts of the region. A mere recognition of the apparent relevance of domestic architecture and spatial control to social relationships elsewhere in Europe may have stimulated an increased awareness or concern for spatial division and layout by courtyard house communities. This may have been even more important to develop if the foreign communities that were informing this awareness were also those communities with whom trading links were being developed – directly or indirectly.

I am not suggesting that a direct knowledge of atrium house form, or of the social and spatial performances associated with it, was of direct influence in the evolution of courtyard house structures. However, a shared understanding of the importance of spatial division to the undertaking of social relationships may have aided the indigenous development of courtyard house form. In addition, it is worth re-iterating the other factors already suggested as having contributed to courtyard house development; the small scale of social group at which the primary stages of social and economic production, trade and exchange were undertaken; the characteristic range of natural resources and environmental conditions that aided a very specific and yet familiar dry-stone architecture, and the flexibility and diversity achievable within the courtyard house form and layout, which enabled each structure or group of structures to be adapted and transformed to reflect local household developments and household identities.

Important spatial relations were also encoded within and enacted through the structured use of space in Romano-British structures a couple of centuries after the inception of courtyard houses (Scott 1993), and the development and

formalisation of segmented space within courtyard houses, although displaying local vernacular traits and an earlier origin, should perhaps also be viewed within this theoretical mindset. Whilst courtyard houses were not ‘brought by the Romans’ at the time of the Roman invasion of Britain, they could be seen as the result of a convergence of spatial ideals and influences, from the 2nd century BC, that resulted from Cornwall’s seaboard situation and mindset. If this was so, we might expect the development of courtyard houses to sit alongside evidence for an increasing concern for spatial division amongst the Later Iron Age settlement of communities elsewhere along the western Atlantic Seaboard. As has been discussed, excavated evidence of Iron Age settlement from Brittany and Ireland remains problematic and elusive (see Bastide 2000). However, in Iberia, we do see an increasing concern for the agglomeration of structures and their spatial division or segmentation occurring during the last centuries of the first millennium BC. Once again, these transformations develop within an indigenous circular building tradition (Martins 1997; Sastre 2002).

Each of these examples can be viewed as localised adaptations of a common concern; but manifest through a set of potentially similar but discrepant seaboard contacts, locally unique social structures, and a more similar set of coastal resources and environment. In this way, these architectural traditions were not methods of communication as much as ‘perceptions’ of a view of the world that involved one another (see Barrett forthcoming). The argument presented above has begun to allude to a very different type of social organisation and social structure operating within Cornwall during the Later Iron Age and early Roman periods. These ideas are revisited in detail in Chapter 7 and combined to form a narrative for the nature of and reproduction of social and spatial relationships within the communities of Cornwall at this time.

5.9 Internal and total area

The final spatial analyses concerns floor area. The internal and total areas of courtyard houses were calculated for sixty-two structures for which details of room and/or structure diameters were recorded (75.6 percent of known courtyard houses). The internal area is the sum total of the floor area of each room within the courtyard house structure. The total area incorporates the area also taken up by the walls of the structure, and was thus calculated from the length and width, or diameter of a structure when calculated from the outside edge of the walls. The areas of rooms and/or structures were calculated using the formulae given in Chapter 3. The plans of individual rooms and/or structures were simplified and categorised as circular, oval or rectilinear. Figures for the internal and/or total measurements for the majority of structures derive from the SMR and any scale plans of individual structures. In cases where plans of structures existed, measurements were compared with those from the SMR. A comparison of the values for internal and total areas produced from both of these methods is shown in relation to a sample of structures in Appendix 5.

In order to maximise the potential for site and structure comparisons, an additional formula was created to enable a total area for a courtyard house to be deduced, when only the internal area was known and no structural plans existed. This formula incorporated a value for wall width derived from the average wall measurements taken from existing plans and literature. Because of the variation in wall width around a single courtyard house, a number of measurements across the walls of a number of structures were taken. The most frequently occurring measurement was taken to represent a usable average wall width, this being 2 metres. This figure was inserted into the formulae below, to enable a total area to be deduced from a known internal area:

To gain the radius (r) of a known internal area:

$$\sqrt{(\text{Internal area} \div \pi)} = r$$

To gain the hypothetical radius (r) of the total area, add 2:

$$\sqrt{(\text{Internal area} \div \pi)} + 2 = r$$

To gain the hypothetical total area, simply place the radius within the standard formula for the area of a circle:

$$\text{Total area} = \pi r^2$$

The error margins involved with using these formulae have been discussed in Chapter 3.

5.9.1 Courtyard house area and segmentation format

Fig. 5.28 presents the range of internal and total areas for the sixty-two courtyard house structures with known dimensions. The distribution indicates that the internal areas of courtyard house structures, for the most part, cluster between 100-200 square metres. The range of size of total area is greater, but is most frequent between 200-400 square meters.

The potential relationships that may operate between segmentation format and total internal/total area could prove significant, but are also likely to be complex. A number of hypotheses have been developed prior to the analysis of the data:

Hypothesis One

A positive correlation between size of the internal/total area and increasing complexity of a segmentation format (i.e. as internal/total area increases, so does the number of rooms within a segmentation format).

This would appear to reflect a practical relationship, whereby more rooms within a courtyard house results in a greater amount of usable internal space. This might imply a larger household size and/or a wider range of spatially specific activities which took place within the structure. An increase in segmentation may also imply more complex networks of spatial relations: the traditional interpretation being that as segmentation and spatial division increases, hierarchical social relations become more distinct and more complex (Kent 1990a: 127). The meaning or impacts of increasing spatial division within communities who employ social relations other than a hierarchy are considered further below.

Hypothesis Two

A negative correlation between internal/total area and segmentation format (i.e. as the internal area increases, the number of rooms within a segmentation format reduces, or vice versa).

In this instance, the relationship between area and segmentation would imply different ways of living within and using space, rather than variations in household size. In this situation, the distribution of structures might be expected to be clustered, relating to significant differences between the function of structures, based around their size and segmentation.

Hypothesis Three

A wide range of internal/total areas associated with the same segmentation format.

In this instance, importance would appear to rest with a specific format, and the spatial relations facilitated by it. The size of a structure appears less significant: larger structures of the same format might be explained through personal preference, the availability of building resources, or by increases in family size.

The persistence of a specific segmentation format across a range of internal areas would imply significance in the way in which that format enabled household relationships to be expressed through spatial segmentation, access and restrictions.

Hypothesis Four

An overlap between internal/total area and complexity of segmentation format (i.e. a range of segmentation formats, of varying complexity, cluster within a close range of internal/total areas).

In this instance, the emphasis would appear to be placed upon the further segmentation of space, irrespective of, or without any need for increasing internal space. This might seemingly reflect differences in the spatial relations operating within a household, possibly due to changes in household composition (e.g. age, gender, status as single/newly married etc), rather than household number.

5.9.2. Structural area: interpretation

Fig. 5.29 and Fig. 5.30 compare internal and/total area and segmentation format, in cases where more than one structural example of the segmentation format exist. From the combination of graphs below, the relationship between segmentation format and area would appear to be more complex than any of the single hypotheses postulated above. In Fig. 5.29, as the number of rooms within the segmentation format increases, the total internal area of the structure also appears to increase, fulfilling hypothesis one, a positive correlation.

This might indicate that segmentation format is more likely to relate directly to aspects of household numbers, composition and the changing spatial relations operating between these household members. The smallest internal area is also the

structure with the most simple segmentation format (1000), whilst the largest internal area relates to a structure with the most complex segmentation format (1111).

When the values for single cases of segmentation formats and known internal area are added however (Fig. 5.31), the picture becomes more complex. The position of format 1121 can be ignored as this value is only a partial calculation of the total internal area at CH2, Bosigran. However, the remaining structures appear to show an essentially negative correlation between segmentation format and total internal area. These latter structures could be regarded as single instances of atypical relationships between segmentation format and internal area. However the fact that all examples appear to corroborate one another may also indicate hypothesis four, that the need to segment and subdivide was in many instances more significant than a desire for more internal space. This complies with the observations noted above concerning the accretion of addition side rooms into a pre-existing courtyard house structure, as well as the later subdivision of pre-existing long rooms (section 5.3.2).

Whilst this latter scenario may be true for some courtyard house structures, comparison of total area and segmentation formats would appear to substantiate a positive correlation between total area and complexity of segmentation format for a significant number of structures. In Fig. 5.30, the total areas of structures generally increase with the complexity of their segmentation format (e.g. 1101, 1111, 1121). This would seem to indicate that the size of household and/or nature of use of these structures were similar, and directly related to the use and subdivision of space within the structure. In addition, the range of total areas exhibited by format 1101 is fairly compact (Fig. 5.32), reinforcing the suggestion that this format reflects the most suitable requirements in terms of space and segmentation of a 'typical' or most frequently occurring household. The distribution of total area for segmentation format 1111 (Fig. 5.33) is slightly

wider, but this may in part, be the expected result of differences between the incorporation within or addition too, a pre-existing structure, of an extra room.

In summary, an examination of internal and total area indicates a significant, but by no means ubiquitous, positive correlation between internal/total area and complexity of segmentation format. This trend implies increasingly complex spatial relations as the result of increasing household size – although these need not necessarily have operated along the lines of a hierarchy. In addition, this data appears to confirm the significance of the dominant segmentation format 1101, as the most common and most appropriate spatial unit for a ‘typical’ household. For certain structures, the subdivision of space has also been shown to have been more important than the production of more internal space. In these instances, potentially more complex spatial relations have been suggested which may have derived from differences in, or changes to, household composition.

The extent to which interpretations can be derived from the examination of internal and total areas has been limited by gaps and assumptions inherent within the method via which internal and total areas have been deduced. By incorporating these figures into comparative analyses with segmentation format, however, these values have allowed for some conclusions to be drawn, albeit tentatively. The figures for total area have also been used within calculations of built and unbuilt space within courtyard house settlements. These calculations are displayed in Appendix 2 in relation to the density of built space at non-courtyard house settlements.

5.10 Summary and discussion

From the analyses conducted upon the dataset for courtyard houses, a number of initial conclusions can be drawn which will be further discussed in Chapter 7.

Initial examination of the segmentation formats revealed two dominant structural compositions, to which the majority of other structures closely conformed. These do not merely complement the spatial relations of the household but rather, actively construct, transform and reproduce, the social relations of a household, through the structured use of space. The uniformity in total area with which the vast majority of structures with the most frequent segmentation format (1101) were built, supports the suggestion that this structure represented the most convenient and perhaps efficient use of space, for a 'typical' or most frequently occurring courtyard house household.

From both a consideration of the spatial statistics and a detailed consideration of several excavated courtyard house sites, the prominence of the courtyard and round room as the central rooms of the house has been confirmed. The function of the 'side rooms'; circular/oval chambers and long rooms, is also suggested to have overlapped. A potential interpretation has been offered to explain the difference in shape between side rooms, which focuses upon aspects of construction and incorporation, rather than function, but the potential for an ideological reasoning behind the co-occurrence of these two kinds of side rooms has also been advocated.

Crucially, an argument has been made for the origin of the courtyard house as a local development of the Late Iron Age, contrary to their current interpretation as a Roman phenomenon, originating after the conquest of Britain in AD 43. This re-analysis has important repercussions for the interpretation of the Late Iron Age – to Roman transition. The processes of courtyardisation and accretion have been highlighted at certain courtyard house sites and have been used to infer changes in the spatial and social relations within and between households on a site by site basis. Aspects of spatial access, movement and view have also been used to highlight the potential for an active set of spatial relations, manifest by the courtyard house, at the scale of the nucleated group and broader community. The

social structures of courtyard house communities is arguably more complex than the model identified for the Roman atrium house, although certain elements of spatial control are shared by the two forms of architecture.

When the spatial layout of rooms was compared with the internal and total areas of courtyard houses, a positive correlation between increasing segmentation and increasing area was found. Increasingly complex or formalised segmentation has often been associated with the evolution of social hierarchies, and when combined with the enclosure of larger areas, increasing household numbers could be suggested as a contributing factor to this development. However, no clear indications of hierarchy are apparent, either within the material assemblages of courtyard houses or between the material assemblages of separate courtyard house structures. Whilst localised variations between courtyard house structures in the degree of segmentation, the alignment of rooms and the control of view and access might indicate degrees of social stratification within households therefore, potential social structures beyond that of simple hierarchy must be considered.

Upon deeper inspection the courtyard houses do reflect a greater variation than their categorisation at first implies. At Carn Euny, in particular, evidence for developed structural segmentation is limited, and as a result, the distinction between 'houses' and 'courtyard houses' is ambiguous. Although interior features such as paving, covered drains and socketed stone post-pads are used to distinguish the courtyard houses from the houses, structurally both are similar; with double-built walls with rammed or earthen cores, and interior posts to support the roof. Initial phases of courtyard house structure appear to have existed alongside more traditional timber and post-built structures, at some point between 300 BC and 50 BC³. On this basis, Carn Euny is suggested to be a transitional courtyard house settlement, spanning a transition toward a new method and way of living.

³ It is important to remember that, as highlighted above, the exact nature of the double walled stone structure (house J) at Carn Euny remains ambiguous.

Having reviewed the evidence for material assemblages and for the processes of courtyardisation and accretion, courtyard houses are shown to have developed from the transforming social context of the Late Iron Age, *not* as a result of the changing social circumstances proceeding the Roman invasion. Potential influences upon Late Iron Age society in Cornwall have been touched upon however; particularly in relation to the development of the courtyard house tradition. Knowledge of the importance of aspects of spatial movement and restrictions within the daily social structures of other communities, gained via localised and discrepant trading relations, has been suggested as one possible external stimulus for the evolution of the courtyard house tradition.

The segmentation of courtyard house structures places additional emphasis upon the spatial relations at household level, and the unenclosed nature of courtyard house settlements might indicate that household definition and identity took prominence over scales of community identity and expression. This is in contrast to the extended households or small communities defined by the rounds, whose primary definition at this scale is manifest in the banks, ditches and/or walls that surrounded them. At Porthmeor, Mulfra Veian and Goldherring, where certain courtyard house structures are grouped together within the banks of earlier rounds, we may be witnessing a *later* transformation of courtyard house community structures at these sites.

Fundamentally, the nature of courtyard house construction enabled these structures to provide a visual and physical expression of household dynamics and changes to household number, composition and structure. Indeed, it is the structural evolution and personalisation that was possible within the adoption of a segmented courtyard house structure which may have appealed to groups who, in terms of structural and social organisation, operated primarily at the scale of the household. This allowed for individuality, and household divergence, whilst still

living as part of a localised courtyard house group and broader courtyard house community. Localised choices at household level can be observed in the unusual room layouts at Trevean for example which, for visitors from other courtyard houses outside of the settlement, would have made the negotiation of spatial relationships within the interior notably different. This evidence has been related to Barrett's discussion of architecture as perception, over communication.

In essence, it appears that it was the potential to manipulate courtyard house structures, to embody, display and reproduce spatial relations at a household scale, and to a lesser degree, the scale of the extended household or small social group, that unified the broader courtyard house communities of West Penwith. They were united in their desire to express their independence at the scale of the household. The social structures embedded around this, the potential for social stratification, the mechanisms via which these distinct communities evolved and the ways in which the communities operated within the broader social landscape of Cornwall in the Late Iron Age and Early Roman period will be explored further in Chapter 7.

6. Spatial Change in Time

In this chapter the spatial transformations previously outlined are considered in relation to the patterns in material assemblages, and in relation to the concept of 'time'. Successions and/or halts in the construction and modification of sites and the depositional actions recorded from them have already been considered in relation to the potential social contexts that surrounded them. What this narrative lacks however is any consideration of the appreciation of time inherent within the Iron Age communities who undertook these actions. More specifically, this chapter seeks to explore the consequences of differing notions of 'the past' and of 'history', on spatial relationships within and between sites. The inescapability of this relationship between space and time can be seen in numerous ethnographic examples (e.g., Evans Pritchard 1940 for the Nuer, Hugh-Jones 1979 for the north-west Amazon, Munn 1983, 1990 for Gawa), where virtually every aspect of daily existence, from the spatial arrangement of the house to gender divisions, material and social exchanges and the topography of the landscape, can only be fully understood in relation to complex myths concerning the origins and histories of the group.

To begin with, attitudes or concerns with the past are categorised in one of two ways (Gosden and Lock 1998): those that relate to the **immediate past** ('genealogical histories') and those which draw upon the **distant past** ('mythical histories'). Having made this distinction, more complex narratives are then be possible, regarding the various interpretations of 'the past' by Iron Age communities and the meanings or motives behind specific attempts to relate to or draw upon these 'pasts'.

A biographical approach to the sequences of actions and events at specific sites is attempted. This enables the comparison of specific narratives concerning Iron Age sites and the combination of actions and events that occurred upon them, sometimes involving features and material from an earlier time. Once the excavated evidence has been examined, investigation moves toward the wider settlement landscape. Many landscape studies overlook more complex sequences displayed at individual sites, and thus the subtleties and contradictions exhibited by prehistoric communities in their relationships with the remains of the past (Bradley 1971: 127). This is the strength of the biographical approach to the archaeological record favoured here.

6.1 The significance of the past

The significance of ‘the past in the past’ was introduced within Chapter 2. Central to this line of enquiry is recognition that throughout time, communities have lived within an inherited landscape, full of cultural markers, features and material from previous inhabitants. Such elements require interpretation, even when the response toward it is one of ignorance or indifference:

‘...like archaeologists...they would have been forced to use these scraps of ancient material culture to understand their place in the world’

(Bradley 2002: 13-14).

Increasingly, associations are being identified by archaeologists that involved the actions of communities in different periods of prehistory and the material culture and physical features of their inherited landscape. Differing approaches to this material are providing insight into the different ways prehistoric communities might

have appreciated and acknowledged their past, as well as the potential motives behind their associations with it. These can be broadly categorised by the nature of response (association or avoidance) and the age of the material being responded to (immediate past/distant past). This latter issue allows consideration of the manner in which the past may have been interpreted in prehistory.

The nature of response governs the approach taken by the majority of landscape studies in this area. These tend to focus on the extent of re-use of monuments, of different types in different periods. Barrett for example, suggests a distinct change in attitudes toward the past during the later prehistoric period in Britain (Barrett 1999). From the fifth – second millennia BC, he argues for a lengthy and continuous elaboration of sacred ceremonial landscapes, orientated primarily around the monumental burial landscapes of the Neolithic. By the late second millennium BC however, this focus ceased, with attention shifting to settlements and enclosures. Whilst these earlier monuments then became ‘an unmodified element of the cultural landscape’, ‘ignored’ as localities for archaeologically visible actions, Barrett argues that they ‘still remained a crucial and integrated component of the Iron Age landscape’ (Barrett 1999: 285). The key to understanding how these ancient monuments were understood within the Iron Age landscape was signified by the lack of modification they received.

Such studies have been vital in recognising the significance of apparent ‘breaks’ with the past, and showing that relict features can still structure social action, even when direct archaeological associations cannot be made between them. However, accounts generated at this scale of analysis can also result in the simplification of the archaeological record, and often miss the subtleties exhibited within regions. With regard to Barrett’s assessment of Iron Age Britain for example, more detailed regional studies are now beginning to highlight the purposeful association of Iron Age landscape features with elements from the past (Bevan 1997; Bradley 2002: 135-141).

6.2 Genealogical histories

In cases where communities can be demonstrated to be actively drawing on material culture and/or landscape features from the past, different motivations for such actions have been suggested. These are derived from the nature of association being made to the past, and significantly, the age and histories of these material elements. Sequences of actions or re-use associated with material elements from the immediate past allow for the possibility of some knowledge or understanding of the original intention of the monument, artefact or event (Gosden and Lock 1998: 4-6). The active references of genealogical notions of history are often suggested where sequences of events or actions have occurred over time, each of which appears to demonstrate some knowledge of or relationship to the previous action or event (Gosden and Lock 1998: 4-6). Such sequences might be observed in the continuation of specific inhumation traditions over several hundred years, for example.

Bradley (2002: 59-67) interprets the sequence of long house construction at the MBA-LBA site at Elp in the Netherlands (Waterbolk 1964, 1986) as being significantly structured by the resident communities' awareness of their own immediate history. In the revised chronology of this site (Waterbolk 1986), ten structural phases are proposed, separated by intervals when the site went out of use. Despite these breaks in the use of the site, the orientations of the structures appeared to respect one another. More than this, it seems to have been important that new 'houses...should touch the positions of the older buildings...(which) could no longer have been standing when the newer houses were constructed' (Bradley 2002: 65).

Such an example highlights the intentional association with a known past: the continuation of a tradition, and the expectation of such a tradition to continue.

Bradley (2002: 85-111) suggests that in some instances, there were direct attempts to control the future through the *intended* transformation of monuments in the future, enabled through oral histories. For many prehistoric monuments, including Stonehenge, the continuing evolution of their development has certainly made archaeologists re-think the 'completeness' of their present form, making them continually 'in progress' (Barrett 1994). The same point is also now argued for modern monumental creations such as cities (e.g. Hillier 1998).

Whilst the builders of some monuments may have intended certain transformations or sequences to occur in the future, these will not always have been achieved in the manner envisaged. Equally, after some time, monuments or material culture can be revisited by individuals who have no concept of the *original* meaning or intentions invested within it. Within inherited landscapes, the interpretation of elements from the more distant past are more likely to lead to the evolution of new meanings, and new understandings associated with them, and with the time from which they came. This is perhaps not surprising given the power and influence that the past has upon individuals and ideologies; after all, he who controls the past, controls the future (Orwell 1949).

6.3 Mythical histories

In events or sequences of actions which associate with material or features from the distant, 'mythical' past, it is fair to assume no understanding or knowledge of the original meanings or intentions invested within the artefact or feature. Both in prehistory and history, this is supported by the very different nature of action involved in the re-use of different monuments across Britain; in, for example, the placement of a Norman castle and later cathedral within the ramparts of an Iron Age hillfort at Old Sarum, Wiltshire. By necessity, a re-interpretation of the past is involved in any cases where elements from the distant or mythical past are re-used,

and as a result, a range of differing motivations behind these actions can be suggested.

A well known example of monumental re-use in Britain concerns the exploitation of prehistoric structures for formal burial during the Anglo-Saxon period (Williams 1998). This practice, Williams argues, was central to the symbolism of Anglo-Saxon mortuary practices, which drew upon monuments from the past (most commonly Bronze Age barrows) as a way of aiding and legitimising the construction and negotiation of origin myths, identities and social structures. As well as re-using these earlier monuments, from the 7th century AD an emerging elite within Britain began to construct their own round barrows, imitating those of the earlier period. This may have taken claims to an ancestral past a step further – not only by associating with ancient monuments, but by implying that this elite were somehow descended from them. By fostering an image as ‘the legitimate heirs of the ancient peoples and supernatural beings that originally built these structures’ (Williams 1998: 104), community-based ethnic identities could be perpetuated, whilst at the same time strengthening elite rights to land and social control.

Instances where a monument or artefact is removed and/or altered prior to re-use might indicate a different approach toward the past and differing motivations behind any association with it (e.g. Chapman 2000). This point is well illustrated by Bradley, in relation to the re-use of decorated menhirs in the passage graves of north-west France. Although many of these ‘statues’ remained in place, several were uprooted, sometimes fragmented, and then incorporated within a passage grave. At Le Petit Mont, Arzon, a menhir was re-situated at the end of an early long mound, whilst two conjoining pieces from another decorated menhir were found incorporated into separate monuments, one within the chambered tomb at Gavrinis and the other within the passage grave at La Table des Marchands (Bradley 2002: 37).

These actions have been interpreted in two ways. The first regards these actions as attempts to destroy the contemporary meanings invested within such material and/or re-invest it with new significance, within the context of a different type of monument. Following this logic, these actions could be seen as an attempt to wipe this memory of the past, ‘an enforced forgetting’ (Bradley 2002: 39). The second interpretation suggests the inverse of this relationship, however, by proposing that these menhirs, often decorated to represent individuals, were taken down after a period of time and re-situated within tombs, as a way of physically and conceptually placing the people associated with the statues within contemporary cultural memory. Rather than an ‘enforced forgetting’, these actions were intended to enforce the memory of this past, ‘remembering by forgetting’ (Bradley 2002: 41-47; Forty & Kuchler 1999).

6.4 Oral Tradition and Memory

Clearly, there is an ambiguous period of time, somewhere in between the contemporary and distant past, where knowledge of local traditions passed on through oral histories begin to slip from memory, and as details transform over generations, become myth. Using the documentation of modern oral histories, the length of time oral traditions can last without significant alterations to their original details and meaning is approximately 200-250 years (Bradley 2002: 14 and see cava-studies.org). Within prehistory, where oral traditions were the only means of documenting and transferring knowledge, we can perhaps assume this period of time to be longer (Brück & Goodman 1999: 8). The power of oral histories within non-literate societies has most recently been raised by the context of the discovery of a new species of early hominid on the Indonesian island of Flores, named *Homo floresiensis* and nicknamed ‘the Hobbit’ due to its small stature (Brown *et al* 2004). Curiously, the features of this new species were found to bear strong similarities with local folk stories that told of a different form of human that lived on Flores,

‘until 200 years ago’. These were named the ‘ebu gogo’ meaning ‘the ancestral grandmother who eats anything’ and were described as hairy, with arms down to their knees (Brown *et al.* 2004). They could not talk, although they could repeat sounds. This is not to suggest that accurate reflections of the past can travel across several thousand years by means of oral histories. However, this does illustrate how detailed oral histories within small traditional communities may have used evidence from a variety of different periods of the past, in the creation of historical or ancestral narratives.

This seems likely to have been the case in prehistory also. The material remains of the past would have necessitated interpretation, although these cannot be expected to have been organised using a similar linear chronology to today. As Bradley (2002: 53) notes, such ‘awareness would have extended from the origins and use of artefacts acquired in daily life, through the built fabric that ancient people inherited, to the wider landscapes in which they lived’. No distinction need have been drawn between the ‘natural’ features of the landscape and its relict man-made components, for both had the power to be used by communities in their understanding of how their landscape came to be. The continued cultural transformation of the landscape lay not so much in its physical modification as in its interpretation (Barrett 1999: 256).

The discussion above outlines some of the ways in which the past in prehistory has been examined to date. The examples bring us back to a point raised in the introduction however: most investigations have concentrated on the ceremonial landscapes of earlier periods. How well can the arguments above be related to the relationships between structures and/or material culture recovered from Iron Age ‘settlements’?

6.5 The significance of the past in Cornwall: the Bronze Age

‘the construction of monuments is always an interpretation of a pre-existing world’

(Barrett 1999: 255).

Several recently excavated sites in Cornwall have been interpreted with the role of ‘time’ as a significant aspect of their conception, and a couple of examples may provide an insight into spatiotemporal practices preceding the Iron Age. Nowakowski’s investigation of Trethellan Farm for example, was pivotal in addressing in detail the potential significance of the previous BA settlement, in the subsequent placement of an Iron Age burial ground on the same site. For Nowakowski (1991: 232-233), it was the prospect of a ‘deep rooted sense of tradition with the site’ which was a key factor in the decision to bury the Iron Age dead in this specific locale. Nowakowski (2001) has also been able to develop some interesting observations with regard to the abandonment of some Bronze Age structures, a trend that can arguably also be traced into the Iron Age (below), suggesting that they were treated as ‘living’ organisms in use, and when abandoned, were taken out of use in a tidy manner, somewhat akin to human burial. Supporting posts were removed and postholes infilled, doorways blocked, outer walls pushed inwards and the remainder of the interior infilled. Whilst such planned abandonment appears fairly destructive, built hearths within structures were left intact and in place; possibly because these were regarded as the identity of the house and as such it would have been offensive to remove it (Nowakowski 2001: 147).

In this way, notions of life cycles and temporal depth can be regarded as deeply embedded within the physical structures and actions surrounding settlements in Bronze Age Cornwall. Several additional sites have since been excavated, where concerns with the knowledge and negotiation of temporal depth and life cycles

again appear to have been primary structuring influences upon their creation and use. A similar sequence of decommissioning was identified at a LBA structure at Callestick, near Perranzabuloe (Jones 1998), with the posts being extracted, the doorway blocked and the interior infilled. The final infilling of the structure resulted in the creation of a low mound, which would have resembled a barrow. Quartz stones were placed around the base of the mound. Small quartz stones had also been placed as a deposit within the central posthole of the structure, alongside some charcoal and a polished stone object, probably used for the grinding of a mineral pigment (Jones 1998-9: 48). Significantly, curated BA pottery appears to have been deposited in a structured manner, with sherds from the same vessel recovered from deposits associated with the foundation of the structure (*c.* 1100 BC) and with its abandonment, four hundred years later (*c.* 700 BC). The actions within this process were spatially controlled, with the vast majority of pottery deposited to the left of the entranceway. The intentionality behind the curation of pottery at Callestick is supported by the final form of the abandoned structure, representing a platform barrow of a contemporary period (Fig. 6.0). Jones suggests that this structure was associated with mortuary ritual or rites of passage, and that the actions relating to the abandonment of the structure purposefully borrowed from earlier traditions and material culture (Jones 1998-9: 51-52). This site reflects a purposeful attempt to hark back to an older way of expression within the landscape, through an apparently idealised conception of a world that was retreating from oral history and transcending into myth (Bradley 2002: 33).

6.6 The spatial location of temporal references

All settlement types feature sequences of events and depositional activity. Within the boundaries of this study, this activity is often located within structures. A significant degree of activity also takes place at the peripheries of settlements: at the enclosing circuits of enclosures (cliff castles, hillforts and rounds) and within/at the

enclosing walls of courtyard houses and individual structures. What appears significant is that the nature of activities and deposits associated with enclosure 'peripheries' would appear to be different, for the most part, from the nature of activities and deposits occurring within the interiors of enclosures and within structures and structural walls.

6.6.1 Enclosure ramparts and the control of social memory

If we examine visible sequences of activity at certain enclosed settlements a distinct concern with the enclosure ramparts is evident. The sites of Killibury and Castle Gotha provide a suitable introduction to the range of temporal concerns exhibited through the current dataset. At both sites, deposits were situated directly beneath their enclosure ramparts. At Killibury a pit was found beneath the inner rampart, containing charcoal and a sherd of lugged, late Bronze Age pottery. At Castle Gotha two pits were found directly beneath the single enclosing rampart, as well as three stakeholes and a patch of charcoal. A single unspecified animal bone was recovered from the base of one of the pits which had been backfilled with a clean brown soil. At the base of the other pit was a single sherd of Bronze Age pottery.

At Killibury, charcoal from the pit underlying the inner rampart produced two radiocarbon dates of 1252-989 cal. BC and 1277-1040 cal. BC (Miles 1977: 100), broadly contemporary with the sherd of pottery. The outer enclosure circuit and activity within the interior at Killibury spans the fourth – first centuries BC. The relationship between the inner rampart and underlying pit thus requires further clarification. One explanation is that all or part of the inner rampart of the hillfort originally dated to the LBA, and was associated with activity which left no mark within the interior. LBA enclosures of this type are currently rare in this part of Cornwall however, and recent concern over the accuracy of radiocarbon dates from charcoal (Bowman 1990) raises further doubts over this interpretation. Other

possibilities should thus be considered. A second explanation could see the construction of the inner rampart at Killibury from scratch, overlying the pit by chance. However, this would seem unlikely given a smear of charcoal around the edge of the pit, implying that the feature was covered over with a considerable amount of material soon after it was infilled (Miles 1977: 111). This leaves a third possibility, that the sherd of LBA pottery was curated and deposited as a foundation deposit at the time of hillfort construction. If the radiocarbon date is deemed reliable, the first explanation is favourable – an initial single banked enclosure of LBA date but with no trace of activity within the interior. With doubts over the radiocarbon date, and in consideration of events at Castle Gotha (below) however, the third explanation for the sequence at Killibury should not be ruled out.

Although similar in nature, the deposition of a single sherd of Bronze Age pottery at the base of a pit underlying the rampart at Castle Gotha thus seems likely to have resulted from a different set of social circumstances to those at Killibury. Here, the sherd of Bronze Age pottery would definitely appear to have been ancient at the time of deposition. The bank at Castle Gotha was sectioned in three places, and its construction dated to the 2nd century BC. The nature and extent of features and associated activity underlying the bank at Castle Gotha appears to rule out coincidence in the later placement of the bank over these (contra Saunders & Harris 1982: 149). As at Killibury, the LBA sherd at the base of the pit may indicate the presence of an earlier enclosure bank which was subsequently removed and then rebuilt in the LIA. An absence of any other evidence of Bronze Age activity, makes this unlikely, however. In all probability, the LBA sherd of pottery was ‘old’ at the time of deposition.

This latter interpretation is also supported by depositional activity within the interior of Castle Gotha. The occupational sequences in the interior are complicated, but several post-built structures appear to represent successive phases of occupation, prior to the construction of a larger, stone built oval structure. The

placement of certain post-built structures within the areas excavated overlapped one another in succession: as one structure was taken down, another was built, adjacent to and slightly overlapping the position of the previous structure. Geophysical survey of the interior revealed similar patterns of settlement in unexcavated parts of the site (Fig. 6.1). Within two of the post-built structures, bronze brooches were recovered from drainage gullies running across their interiors. One of these was a small penannular brooch of the 1st century AD, whilst the other was a hinged brooch of the 2nd century AD. Both brooches appear to have been broadly contemporary with the use of the structures they were found within.

From actions from within the interior of Castle Gotha, we can suggest deliberate attempts to connect with the immediate past, and actions through which a collective memory of this past could be maintained. Structures were re-built with direct reference to previous structures, perhaps also re-using parts of the fabric of these earlier structures, such as the timber posts. In addition, an act of deposition, using a similar item in the same context was repeated in two structures, several generations apart. Both forms of action represented a conscious desire to remember or associate with an event of the recent past, and in so doing, enhance a collective memory of a genealogical history (see Bradley 2002; Gerritsen 1998).

6.7 Negotiating relationships in time and space

The events at Castle Gotha and Killibury reflect differing mechanisms via which elements of the past were incorporated into the fabric of Iron Age sites. At both sites however, interpretations of the past were being confronted in the construction of new monuments. The acknowledgement of previous actions at these sites was expressed through the spatially controlled deposition of material culture, and in the location, construction and re-building of enclosures and dwellings.

These sites demonstrate the social concerns and spatial trends that, as is argued below, are also observable across the remainder of the Cornish dataset. The basic premise offered here is that the way in which localised communities and groups perceived their past differed both over time and over space, and that these differences affected the way in which space was arranged and used on site. In addition, it is argued that a significant amount of activity concerned with the referencing of, or the establishment of associations with versions of the past, occurred at different forms of settlement boundary (enclosure ramparts or house walls), as these were the features that physically and conceptually defined the main social unit. These physical boundaries not only acted as a representation of the identity of the associated household or social group, but may also have been associated with factors or elements of control applied upon the associated household or group. As such, differences in the scale and location of these actions may inform us, not only of the different ways in which the past was perceived, but also of differences between the scale of social groups and of group identities.

6.7.1 The construction and reiteration of identities

If an extant LBA enclosure at Killibury was subsequently expanded into the bivallate hillfort, an awareness of the longevity of the locality must have been present within the minds of the LIA builders (and later occupants). Although upland enclosures of LBA date remain rare in this area of Cornwall, the process of incorporating or re-using Bronze Age ramparts and other features within Iron Age enclosures is by no means unique, and can be observed in varying forms – at Maen Castle, Bosulow Trehyllys and Trevelgue Head. A lack of any evidence of Bronze Age occupation at Killibury, and the potential length of time between the event associated with the pit underlying the rampart and the creation of the Iron Age enclosure, argues against the *continuous* settlement of this spot by descendants of the same community. The perception of a distant, mythical past seems more

probable in any interpretation of the appropriation and development of this site in the Iron Age. Indeed, the potential to create physical and conceptual ties with a distant, malleable past, and to capture and cultivate these within social memory, may have been a significant factor in the re-occupation and development of this locale (see below). It is also worth remembering the significance of 'place' that continues at Killibury, with the construction in the early Romano-British period of Tregilders, a sub-rectangular enclosure situated a couple of hundred metres from the hillfort. Whilst this enclosure is associated with the 'abandonment' of Killibury, the trackway discovered between the two sites is likely to have originated at this time (Trudgian 1977: 127-128).

Attempts to lay claim to, or make associations with different notions of the past are apparent at other enclosures of the Later Iron Age. At Castle Gotha it appears probable that old material, invested with a past or 'history', was meaningfully deposited at the base of a pit, prior to the construction of the enclosure rampart. The location of this deposit is significant. Ramparts form the physical definition of the resident group's spatial boundary and are constructed and maintained by the group, thus being both physical and conceptual manifestations of the group's identity as a unit. If this is so, can we suggest a significance in the scale and nature of association being made between the rampart and the location of deposition – a direct relationship between the founding of the enclosure (the physical representation of the arrival of the resident social group), and the distant 'mythical' past people associated with the LBA lugged pottery sherd perhaps?

The re-incorporation of a Bronze Age lynchet at Maen Castle caused a physical and visible kink in the rampart of the cliff castle, a marker of the point at which the earlier feature became incorporated within the enclosure boundary (Fig. 6.2). Some conception of the relationship between the group constructing Maen Castle and the time period and/or population associated with the pre-existing lynchet seems likely to have existed within the minds of the builders, and the association with this earlier

feature, visibly expressed in the realignment of the rampart, might suggest a deliberate attempt to formalise this relationship within collective memory. Each time this rampart was observed or renewed, the kink in its alignment would have prompted explanation, and thus could have been used as a visible reference to the narrative which associated the inhabitants of the present enclosure with the previous inhabitants who occupied the headland.

Bradley (2002: 77-80) has argued that the inclusion of cairns and house structures within the land boundaries and stone rows of Dartmoor provided a legitimacy of place, and a basis for group identities based on notions of ancestry with the past. This pattern of association can not only be extended to Maen Castle, but also to other sites where similar instances of re-use occur. The inclusion of earlier features into surrounding field systems can be seen at other Later Iron Age sites: at Chysauster for example, a house and kerbed cairn of Bronze Age date were incorporated into the extensive field systems associated with the courtyard house settlement (Christie 1997: 5). The aim was not to destroy these monuments and re-use their fabric, but to cause as little damage to them as possible whilst incorporating them into a contemporary reworking of the landscape (Bradley *et al.* 1994).

With reference to prehistoric communities, Bradley (2002) has suggested that the control of social memory, of versions of history, was crucial to forms of ownership and legitimisation, be it in land or titles. In the same way, the incorporation of past landscape features may reflect attempts to control the social memory of the distant past which enabled a link to be created between that time, and the present. In doing so, individuals would have been bound to one another in a shared sense of tradition, place, and possibly ancestry. Interestingly, in this respect, the kink in the rampart at Maen Castle would have only been clearly 'understandable' to the people who created the enclosure, and who shared in the cultural memory surrounding its construction. In other words, the association with the past in this instance may have

been intended more for those individuals who occupied or associated with the enclosure, than for any outward expression of identity.

6.8 Differing pasts; differing identities

In the majority of examples discussed above, references to material or features from the distant or remote past have been highlighted. The mechanisms for understanding this distant 'past', it has been suggested, did not associate with memories of specific household members or individuals present within the cultural memory of the immediate past. Rather, these distant pasts were informed by landscape features and material, the accurate interpretation of which was beyond the likely scope of oral histories and genealogical narratives. The people and events associated with these features and material culture must, at least in part, have been removed from the specific contexts of their creation, meaning, and use. The interpretation of the distant 'mythical' past was constructed in the present, and involved appropriated narratives and mythical agents, whether or not any direct kin-based relationship was claimed with them.

In addition, it has been argued that certain hillforts and cliff castles such as Maen Castle, provided places for the temporary meeting of social groups which were larger than the domestic household (the primary unit of economic and social organisation). These groups would have consisted of members of separate households from across a wide area, whose meeting may have been tied into the seasonal movement of livestock, for new pasture or breeding for example. The temporary nature of the social group, and the fact that the composition of such groups changed from meeting to meeting, would have made the construction and reaffirmation of a community identity, and the control of social memory, very important. Significantly, however, due to the scale and composition of the group, belief in a communal identity would have transcended any foundations within a

genuine genealogical lineage or ancestry. Instead, the basis for a community identity would have had to draw upon a more distant origin, and as such necessitated the re-working of a more distant past through which a historical foundation for group identity could be forged.

This may explain why the majority of references to a distant 'mythical' past, discernible in the archaeological record, are found at cliff castles and hillforts. In addition to the examples discussed above, the distant past can be seen to be incorporated in social consciousness through the alignment of the entranceway at Chun Castle on a Bronze Age quoit less than 100m away, and in the incorporation of Bronze Age barrows within the interiors of the Iron Age enclosures of Castle-an-Dinas hillfort and Trevelgue Head cliff castle. The latter site has also produced the only evidence for large-scale ironworking in the region. Metalworking during the Iron Age has long been argued to have physical and conceptual associations with peripheries and liminality (e.g. Hingley 1997, Sharples 1990). A case has already been made for the ambiguous, liminal spaces provided by cliff castles (see section 2.4.10), and the inclusion of ancient monuments of the dead within the interior at Trevelgue may have been one way of stressing the 'otherness' of this site, and potentially, of the individuals who used it. Once again, similar examples can be found elsewhere in Iron Age Britain, where the apparent association and/or respect for monuments of the distant past have been interpreted in terms of ancestral veneration, or claims of ancestry (e.g. Hey forthcoming, Barrett 1999, Hingley 1996).

Moreover, the scale and nature of the social group that used cliff castles and hillforts, may help further to explain the location of events of re-use and the veneration of the past (namely the enclosure boundaries and interiors of enclosures), at these types of sites. In the narrative offered, the scale of identity of concern is that of the temporary or seasonal collective, and not of the subdivisions of household and extended household within it. This group is best defined by the

enclosure boundary and the generic interior of the enclosure, and not by the limits and interiors of any domestic structures. Thus, it is proposed that events relating to the distant past took place in these rampart locations because they best reflected the scale of identity under construction and scrutiny.

In the descriptions above, then, we can identify specific events of enclosure which included or assimilated ancient landscape features or material culture; material for which distant and mythical traditions would have been invoked to interpret. In certain instances, this relationship between the present enclosure and the material of the past was purposefully and meaningfully manufactured at the enclosure rampart. This, it is argued, is no coincidence – the rampart also being the defining boundary of the resident social group (Fig. 6.3). For the majority of cases, this group would seem likely to have consisted of several households, perhaps with their own distinct familial lines. This would be particularly true of the composition of groups who met at ‘communal’ sites such as hillforts and cliff castles, if this is how these sites were used. As such, it should perhaps not be surprising that it is elements of the *distant* past – of a ‘*mythical history*’ – that are drawn upon at these boundaries and used for the construction and maintenance of collective and/or temporary group identities.

This, it will be argued, is in distinct contrast to the actions taking place within household structures of rounds, courtyard house settlements and other enclosures, which can be associated much more frequently with events relating to the immediate or recent past. Here, a stronger focus upon recent ‘genealogical histories’ can be argued, which seem more appropriate for, and more likely to relate to, the identity of the household (see below). It is important to state however that the model outlined (and tabulated in Fig. 6.4) is likely to be a simplification of actual social practice. The problems inherent in categorising the settlement record have already been discussed, as has the probability that many of the sites discussed here should be considered in terms of an evolution of settlement, in terms of the degree of enclosure, size of site and permanency of residency. Furthermore, the extent to

which actions relating to ‘similar’ but unique social events or situations and discernable in an inherently partial archaeological record will appear ‘the same’, is dubious (see 7.0). As such, the model proposed is only a model, and is only suggested to reflect traces of a potential system of community order and social referencing operational within the Iron Age and early Roman communities of Cornwall. The acts of repetition in construction and deposition tabulated in Fig. 6.4 highlight the complexity of identities potentially being referenced across site types, but nevertheless I still feel these support the simplified model of identities and spatial relationships outlined in Fig. 6.3.

6.9 Associations between ramparts and structures

The above actions at ramparts were not the only ones which may have been related to the reiteration of collective group identity. The relationship between members of a ‘household’ and the resident social group would also appear to have been reproduced in the positioning of structures within the settlement boundary. The making of a subtle but intentional contact between the structural features of a house and the enclosure rampart would appear significant in this respect (see 4.7.4). By affiliating seemingly ‘domestic’ structures with the enclosure boundary, occupants may also have been physically and conceptually placing themselves within the boundaries of the resident ‘community’. This association gains further meaning, if the boundary has been embodied with cultural material and associations of peoples from the past, as at Castle Gotha for example. It is important to remember, however, that such associations between structures and enclosure ramparts take place at all ‘types’ of site; those that reflect permanent residences as well as those that might reflect, at certain times, the temporary coming together of members from the wider community.

Additional associations made between structures and enclosures can be observed in the remodelling of Castle Dore. This originally bi-vallate enclosure was heavily modified during the last couple of centuries BC (Quinnell and Harris 1985: 125-126). The inner rampart was heightened and revetted with stone and the inner ditch re-cut. The outer rampart, which at the entrance formed an outer 'barbican' was not maintained and at some point three structures were placed over the rampart in this area (see Fig. 2.10). Once again, the positioning of these structures would appear to have been strategic, aligned along the earlier rampart, indications of which would surely have still been prominent within the memory of the inhabitants of Castle Dore, as well as visible to the eye. The direct association of the earlier rampart with these structures was purposeful, perhaps with the intention of making a definite connection between the physical definition of a social group, and subdivisions within it.

6.10 Structures and genealogical histories in action

In addition to the association of certain structures with the enclosure banks at St Mawgan-in-Pyder already discussed above, certain other structural sequences have also been noted. As already highlighted, Hut V was built twice, but a large degree of effort was taken to ensure that the second phase of this structure was located upon exactly the same foundations as the first (see Fig. 6.5). Other structures also display close relationships at St Mawgan-in-Pyder. Huts D and E, huts W and A, and huts W and S all appear to share certain postholes within their outer structure. These structures, from their associated material assemblages, were broadly contemporary. The emphasis here would seem to be in the associations of structural post holes (and perhaps timbers?) between structures built in quick succession of one another. Any time lapse between the deconstruction of one building and construction of the other would have been relatively short, making any material or conceptual references between them fit within a genealogical time frame. The

histories invested within and around these structures would have been concerned with particular household members and generations, rather than with distant communities beyond familial memory.

Similar structural trends have already been identified above, in relation to the prehistoric communities at Elp. More recently, using data from the Maas-Demer-Scheldt region, Gerritsen (2003) applied a biographical perspective to the characteristic short-lived and wandering settlements of the area, which enabled the changes occurring at these dwellings to be placed in a context which focuses upon the self definition of local groups through their perception and ordering of the landscape (Gerritsen 2003: 254). A transition to geographically more stable settlements from the Middle Iron Age, Gerritsen argues, reflects a shift in the scale and manifestation of identity, toward kin groups and ancestral ties to permanent dwellings (Gerritsen 2003: 247).

The consistent re-building of structures on the same location can help build feelings of genealogy and lineage amongst its residents – an immediate past or ancestry which could be understood through the fabric of the structure. Although the social changes outlined by Gerritsen are contextually specific to the Meuse-Demer-Scheldt region, a similar concern for re-building structures in the same location time and again can be observed across many regions of Iron Age Britain, including Cornwall. This process has already been identified at St Mawgan-in-Pyder and Bodrifty for example, and can also be clearly identified at Trethurgy, Killibury, Trevelgue and the Rumps. Numerous phases of rebuilding in the same location are also a feature of the excavated courtyard house sites, and are particularly prevalent at Carn Euny.

At The Rumps, an area with over 50 postholes appears to indicate the repeated re-building of a structure or structures over some time, perhaps periodically or seasonally, as the interior seems to have been left un-roofed for short periods

(Brooks 1974: 22). An interesting sequence of events, involving the hearth associated with this group of postholes was also recorded, whereby a post had been pushed through the hearth and into a previous posthole which had been covered by the hearth itself. Considering the relatively slow accumulation of ash witnessed in the experimental burning of hearths by Reynolds (1983: 188) it would seem probable that several decades would have passed between the covering of the posthole by the hearth, and the placement of a post through the hearth and back into the posthole. If so, the perpetuation of an accurate knowledge of the sequence of events in this area might also seem likely.

A more immediate, 'genealogical' appreciation of time is also manifest at Castle Gotha. As described above, the sequence of internal structures made associations with one another through the direct overlaying of their outer gullies, their gradual movement across the interior of the enclosure, and the similarities between the nature and context of brooch deposits within the structures, all indicating an understanding of the recent history of the site in operation. These events occurred over generations, and imply accurate oral histories detailing the traditions of the immediate household. Interestingly, the re-building and maintenance in exactly the same location over generations, does appear to occur more frequently within rounds, enclosures and courtyard house structures (see discussion below). Could this reflect the nature of the past being associated with, within these types of sites, and in contrast to the longer, mythical histories suggested to have been operating at the cliff castles and some hillforts within the region?

6.11 The re-use and deposition of artefacts within a structure

A sense of temporal depth, and of previous generations associated with a household, may not simply be provided through the persistent re-building of a structure upon the same location, but also through the types and nature of material

used and re-used within the fabric of the building. In this way, the social development or flux of the resident household can be documented and communicated, both to themselves and others:

‘the number of occupants increases as the building provides a home for different generations, so that the house itself becomes a historical document, tracing the life course of the people who live within it’

(Bradley 2002: 24).

This mechanism, whereby the dynamics of the household could be traced through the development of the structure has already been suggested for Cornish courtyard houses. In addition to the composition of the household, the inclusion of aged artefacts within the walls of these structures would have provided a reinforcement of the sense of lineage and history associated with the household, particularly when such items appear to be in mint condition. At Porthmeor for example, saddle querns in mint or near perfect condition were re-used within the round rooms of CH1 and CH2; whilst at Carn Euny several of the quernstones recovered were also from courtyard house walls. At Castle Gotha, fragments of a saddle quern were found reused in the floor of one structure, whilst a rotary quern was positioned beneath the wall of another. Fragments of both quern types were also found in the boundary ditch. Similarly at Bodrifty and Trevisker, the querns came mostly from floor contexts. With reference to the continued practice of formally dismantling some Iron Age structures, the re-use of wooden posts might also be important in the maintenance and development of oral traditions regarding the recent genealogical histories of the household (e.g. Bradley 2002: 69).

6.12 Deposits of material beneath structure walls

In a similar fashion to the deposits of 'used' or 'curated' material recovered from beneath enclosure ramparts and boundaries, there is also evidence for significant deposits, employing 'old' or 'used' material, beneath the walls of individual structures. Two structures deserve separate mention, both of which had deposits placed beneath their structure walls, and both of which appear to demonstrate the recognition or referencing of the more immediate past.

At Harlyn Bay, a circular single-walled structure was found adjacent to the Iron Age cist cemetery. This structure had a sunken floor and yielded no pottery or other artefacts of contemporary date from its interior. As with the BA structures discussed by Nowakowski (2001), this structure underwent a complex sequence of abandonment, with internal timber posts being removed and their postholes backfilled, and the walls of the structure pushed inward before the remainder of the interior was infilled with sand and slate. The nature of this abandonment process, and the lack of any evidence for occupation indicates a 'ritual' use, a suggestion further supported by the reported discovery during initial excavations from 1900-1905 (Bullen 1902) of two crouched inhumations, crushed beneath the wall of the structure. These skeletons were of an adult and a child, the former having been buried with a ring of bronze and two iron objects, one a bracelet. Such grave goods are unusual when compared to the relative scarcity of grave goods associated with the cist burials within the cemetery.

Quite who these individuals were remains speculation, but they were clearly significant to the original creation of the structure, which in turn appears to have related to the establishment and use of the burial ground. Were these individuals foundation deposits, designed to leave a permanent impression within cultural memory of the identity or lineage that united those who used, and subsequently resided within the burial ground (Whimster 1977: 69)? Indeed, does their presence

beneath the walls of the structure elucidate further details regarding the use and function of the structure, as a place within which the cultural history and identity of a wider social group was remembered and restored to visitors?

A different kind of foundation deposit was used for House A at Carn Euny, but once again this appears to have called upon an impression of the past. Beneath the entranceway to this structure, the remains of an iron pruning hook was recovered (Fig. 6.6). The nature of this item was unusual, however, in that it was much more reminiscent of a LBA than an Iron Age form (Christie 1978: 393). The context from which this item was recovered suggests that it was not of transitional LBA-EIA date, but rather, that it was manufactured in the LIA to emulate a LBA version. The antiquity or implied antiquity of these items would have been clear, if only because they looked different from the types of material in use at that time.

Intentional re-use or incorporation of aged material may not have been restricted to buildings and houses. Woodward (2002) has highlighted the potential symbolic significance of different grogs and tempers used in pottery vessels from the Neolithic through to the Iron Age in Britain. A variety of materials, including fragments from aged or 'known' pots, dusts and sands from used querns, and broken-down calcified flint, Woodward suggests, were used as tempers at different times due to their contextual symbolic associations. Thus, MBA vessels which incorporated fragments of other vessels from the EBA and earlier, may have drawn significant meaning from this temper because of the individuals who were associated with it (Woodward 2002: 109). Similarly, in the LBA and IA the incorporation of sands and dusts from the shaping and use of querns is suggested, and a symbolic significance placed on this act due to the important transformational role that querns performed in Iron Age life. These items are frequently recovered within Iron Age structured deposits (e.g. Hill 1995). The complex life cycles or biographies of certain implements that may have resulted in elements of their fabric being re-incorporated as temper, within pots. The power of the aged or previously

used items may thus have been reinvested and transformed, albeit in a different social milieu.

This is an interesting proposal, although it is also worth remembering the potential significance of the sourcing of both clays and tempers in the production of pottery. As noted previously (Chapter 2), the vast majority of later prehistoric pottery in Cornwall derives from the Lizard peninsular, which may indicate a degree of symbolic meaning associated with this source (Harrod 2003). In light of the cases made above concerning the symbolic ancestral importance of cliff castles and other rocky areas in Cornwall (see Cripps & Giles forthcoming; Sharpe 1992), the significance of the source of stone temper, be it via a quern or not, should not be underestimated.

6.13 Genealogical histories and household identity

The sequences of structural development and depositional events discussed above seem to refer, in differing ways, to the actions and peoples of the distant past that resided within recent memory. A trend in the location of actions and events relating to the immediate past is also discernable. Rather than occurring at the boundaries of enclosures (locations favoured for events relating to the distant past), events relating to the immediate past and genealogical notions of history, appear most frequently in relation to individual structures, particularly the fabric and walls of these structures and their interiors.

In Cornwall, the types of sites where actions concerned with the immediate past have been identified tend to be rounds and courtyard house settlements. These are the same types of site that reflect more frequently the permanent settlements of a household or extended household. The use of the more immediate and tangible past, of direct genealogies and lineage, would seem to be a more suitable basis for the

construction of identity for this scale of smaller and more permanent social group. Once again, this is in contrast to the argument proposed above - for the correlation between the manipulation of the distant past, and the coming together and uniting of temporary larger collectives, at sites such as cliff castles and some hillforts (Fig. 6.3). As has also been stated however, it is important to remember that this model is likely to be a simplification of any relationships between time, space and identity expressed across the complex settlement record of Iron Age and early Roman Cornwall (see Fig. 6.4).

6.14 Summary: differing pasts and scales of identity

The creation of enclosing ramparts at the various types of enclosure in Cornwall would have been activity that was progressive, evolved over some time and incorporated several households, or the wider community. The ramparts and ditches of an enclosure would be a reflection of the collective group that constructed them, and presumably, used them. In this way, the association of events with enclosure ramparts is suggested to reflect concerns with either group identity, or an individual's position as part of that group. In contrast, actions relating to specific structures – in the re-use and structured deposition of material culture, and in patterns of building and re-building – have been suggested to relate to household histories and notions of identity at household scale. Supporting this suggestion is the different types of 'past' that are associated with at these differing locations. Within structures, actions appear centred around material from the immediate past, or the results of previous events within the recent past, such as hearths and postholes. This is in notable contrast to the older features and material found in relation to enclosure boundaries and which, it has been argued, provided a conceptual association between the identity of the group invested within the rampart, and a distant or mythical past.

Not only were these different perceptions of the past being referenced in different *locations* on site, but they also appear to focus upon different *types* of site. This latter trend may help to provide a better explanation for the differing employment and utilisation of both the immediate or genealogical past and the distant or mythical past. If, as has been argued above, the construction and maintenance of enclosure ramparts was a process undertaken by groups of people, rather than a single household, it follows that the large multiple rampart enclosures such as the cliff castles and some hillforts, were built and maintained by a larger proportion or section of the community. If this was the case, it also seems likely that these enclosures were used by or facilitated a larger number of people than, for example, a much smaller univallate round. The potential for hillforts to act as collective centres, at certain times, for the temporary meeting of members from the wider community, has been proposed for regions elsewhere in Britain (e.g. Hill 1996; Sharples forthcoming; Stopford 1987), and in Chapter 2, the potential for some hillforts and cliff castles to have operated in this way in Cornwall has been discussed. Cliff castles have, in particular, been identified as locales reserved for the demonstration and negotiation of relationships outside or beyond those of the everyday household (Cripps and Giles forthcoming). As such, cliff castles are perhaps most clearly the venues most fitting for the temporary meeting of individuals from the wider region. This is not to say that these sites never received more permanent 'occupants', but rather that they were not designed simply as standard residences.

The gathering of differing individuals at cliff castles, and possibly some hillforts, might be envisaged alongside periodic events of transhumance or rites of passage. If this was the case, this may offer an additional explanation for the types of past that were being utilised at these sites. As a temporary collective of individuals, the composition of which is likely to have varied from meeting to meeting, the necessity to create or promote a unified group identity would have been particularly important. This process would have been aided in part through collective actions,

such as the re-digging of ditches and the re-formation of ramparts (Giles forthcoming, Sharples forthcoming). However, actions which also drew upon a distant past, and which could be appropriated to all, helping to re-form or re-educate a collective social memory, would also have been vital. Is it any co-incidence then, that the types of sites at which elements from the distant past are more prominent, are cliff castles and hillforts?

In contrast, the reiteration of a more distant and protracted sense of history would not necessarily be required within the smaller scale of the household, for it was at this level that the composition of smaller social groups were stable, and at this scale that the everyday routine of economic and social organisation operated. An appreciation of the recent past and of the familial generations of the settlement would already have been operational within the social memory of the inhabitants. At this scale, notions of genealogical histories were much more relevant and appropriate to the cultivation of household identities, and this is perhaps why we see far more references to the recent past not only around structures, but particularly structures within rounds and courtyard house settlements. It is the rounds and courtyard house settlements of the region which, after all, have been suggested to reflect standard domestic settlements and the scale of the household and extended household at which social and economic organisation was primarily orientated.

7. Discussion: Transitions in Spatial Relations and Identities

7.0 The nature of the archaeological record

Before embarking on this discussion, it is important to reiterate several well documented but critical issues with regard to the nature of the archaeological record. The first is that we are dealing with fragmentary remains of an originally partial dataset (e.g. Cameron & Tomka 1993; Shanks 2001; Shanks & Tilley 1987: 7-27). As discussed in Chapter 2, the remains recovered from both settlement and non-settlement contexts are the culmination, frequently, of a complex variety of abandonment and post-abandonment factors. A second issue is the nature and transmission of 'knowledge' and 'understanding' in the later British prehistoric past. The dominant mechanics of communication at this time were oral histories, social action and performance – as in extant non-literate societies. The importance of visual and physical acts in supporting oral traditions is well attested (Vansina 1985; Brück and Goodman 1999: 8-13; Pollard 1999; and Helms 1988: 131-162 for example). Everyday life in later prehistory would have been consciously enacted. A combination of oral and visual transmission would have integrated time and place in every aspect of cultural life (e.g. Barrett 1994; Pollard 1999; Bailey 1999; Krause 1999). Cultural knowledge, identity and understanding would have been reinforced through actions, activities and events which provided learning and experiences, taken on through later life.

Having acknowledged these two points, to what extent can archaeologists offer any reflective interpretation of the people of prehistory? Primary importance has to be given to the site-based analysis of cultural material. Several authors have now illustrated quite brilliantly, the ways in which the differential use and/or contextual experience of an object can transform its meaning over space and time – even when

objects are fairly widespread, and visually, technically and compositionally the same (Appadurai 1986; Gosden & Marshal 1999; Kopytoff 1986). The context and nature of use and/or deposition has been shown to be all-important in the interpretation of the cultural record, above and beyond the nature of items and material itself.

This is all well and good. But how do we then move from a contextual, site-based, bottom-up approach, to any form of broader narrative? For many, it is only at a scale beyond that of a single site, that a narrative may have any use or meaning for the interpretation of the past. Due to the partial nature of deposition, and the social processes, actions and events through which prehistoric knowledge and understanding developed, we *cannot* expect to see the same depositional markers from site to site. We *should* expect a variation in the ways in which similar issues were dealt with from site to site, even when the approach to and/or understanding of that issue by individuals and groups was similar. The communities of two sites may have for example, comparable ways of celebrating a marriage alliance, but small differences in the structure of the event (e.g. in the materials of objects used in the ceremony, the composition of the participating group, or the sequence of events) which, when combined with post-depositional factors and excavation biases, may result in very different traits in the archaeological record.

Rather than expecting exact repetition we should heighten awareness of similarities in the processes and nature of residues, and in the sequences of actions between sites. These may not be exact mirror images of one another, but the variation exhibited does not necessarily make such trends less significant. Indeed, where apparent replication of material and/or archaeological sequences does occur, the result has often been over-simplistic and generalising narratives. An obvious example would be in the early migration-orientated interpretations of the cart/chariot burials of Champagne, France and East Yorkshire, England. Continued interpretation of the social role of unexcavated sites on the basis of their external

appearance or categorised 'type' is another. The more ubiquitous trends or traditions appear to be, the more willing we are to settle for un-complex, monocausal narratives of the past. The complexity inherent within the class of 'courtyard house settlement' and the problems of viewing these structures as a simple product of the Roman conquest has been discussed above.

7.1 Structural change and identity in time and space

In previous chapters various distinctions have been recognised in patterns of differential deposition of material culture across space and time which, I have suggested, reflect complex, varied and locally-organised social groups developing in Cornwall during the Later Iron Age and early Roman period. These consisted primarily of distinct households and extended households who operated and organised themselves at a local level for everyday activities. The mechanics of social organisation advocated below for these communities is one of heterarchical social relations, as opposed to a hierarchical or egalitarian social structure (see 7.6, below).

7.2 Interpreting courtyard house settlement

An initial distinction is between the scale of social group that used and lived in courtyard house settlements, and those, resident in rounds. For the former, the reiteration of social identities and everyday social practices has been recognised at the scale of the household, and for some sites, the small group represented by the courtyard house village. For rounds, the primary scale of identity and associated social practice has been recognised at the scale of the extended household, enclosed by the defining banks of the site.

The most conclusive evidence supporting this interpretation derives from the nature of construction on site, from the use and adaptation of built space and from the manner with which notions of the past have been incorporated into the definition of built space, at differing scales – individual structures, enclosures, and at landscape level. This evidence is now reviewed below.

7.2.1 Courtyard house construction and agency

Through the identification of processes of courtyardisation, and a re-assessment of the dating evidence for excavated sites, courtyard house settlements have been shown to originate in the last couple of centuries BC (see 5.4). Although all excavated examples apparently continue into the Roman period, and several were built during the Roman period, these settlements clearly derive from the local, pre-existing Later Iron Age social landscape; they are not a new type of settlement brought into the region *with* ‘the Romans’. Carn Euny is pivotal in this respect, reflecting a transitional LIA-RB courtyard house settlement. The Carn Euny structures are similar in size to standard courtyard houses: they have distinctive long entrance passageways and are nucleated but unenclosed. These structures have embryonic side rooms which have not yet developed into classic courtyard house form.

The processes of courtyardisation and accretion emphasise the way in which the physical household structure reflects changes in household composition and/or transformations in household dynamics. In this way, a courtyard house structure acted as a metaphor of the household and a record of the shifts in household dynamics over time, marked in the scars of different constructional phases of walls, in the addition of rooms and/or structures, and in changes in room shape and location within the structure. Both externally and internally, particularly by those communities practiced in building these types of structures, courtyard houses could

be 'read' as a visual record of an individual household's identity (in terms of composition and social structure) and in many cases, the household's developmental history. In addition, the frequent occurrence of associated garden plots, and the apparent lack of any social or functional distinctions between structures within a courtyard house settlement, evident within the material remains recovered from these rooms, indicates a degree of economic self-sufficiency, operating within the economic security of a larger group.

Courtyard houses combine to represent a scale of identity beyond that of the immediate household however. These structures employed wider social associations both geographically and temporally: the inherent 'frames of reference' identified by Gosden (1994: 17). At one level, the conformity (in general) toward the nature of a courtyard house layout, with the same forms of room and frequently the same or similar arrangements of room both within and between courtyard house settlements, reflects a wider community 'perception' of spatial ideology; in the manner of internal and external spatial division and the demonstration of spatial relations within households. This structural tradition or ideology has a reflexive relationship with the collective processes of the physical building and maintenance of courtyard house structures, incorporating members of the wider community from within and between other courtyard house settlements.

It is in this context that we may attempt to identify the actions of socially embedded agents (Barrett's 'pluralistic agency', 2000). Tensions in the construction process, between the needs, ideas and desires of the resident household, and the sharing and transforming of wider ideas and references gained through an experience of other courtyard houses, courtyard house communities and from members of other courtyard houses who may have been involved within the construction process, have already been identified above (see 5.9).

Certain variations to a preconceived norm (in the repeated positioning of the round room adjacent to the entrance, rather than opposite the entrance, at Trevean for example) reflects a very specific desire to stand out from, and be different to, other courtyard house communities - particularly considering the influence of courtyard house format in the structuring of spatial relations. These small-scale, internal variations in spatial layout reflect one aspect of what Barrett (forthcoming) has recently described as the ability for architecture to represent the perception of a wider 'world view' – for outwardly 'standardised' architecture to reflect distinct perceptions of a wider architectural 'identity'.

7.2.2 Similarity through difference

If, as has been argued, the scale of social organisation and of social identity for courtyard house communities operated *primarily* at the level of the household, we may see another benefit to the courtyard house structure. Courtyard houses actively facilitated the continued reproduction of the social structures and scales of social identity that constituted resident communities. The ability to transform and personalise (in terms of actual use), a settlement type as distinctive and iconic as a courtyard house, enabled the individuality of household identity and organisation to exist as part of a broader cultural tradition. It may have actually been the ability for individualisation and expression through the courtyard house that made this form of structure appeal. The significance of courtyard houses for their residents may not have been the outward similarities in architecture, but rather, the small-scale individualities that this structure enabled. These minor differences are traits that have until now been overlooked in the categorization of courtyard house structures.

Courtyard houses enabled a way for specific households to express their cohesion as a broader community *through* their difference. And if the relative socio-economic independence of these households was of value, this would help to

explain the development of this distinct architectural tradition within the region, alongside contemporary and more long-lived settlement forms such as the round. The expression of similarity through difference has been commented upon extensively by Gell, in terms of his 'axes of coherence' (1998: 216-217 and 215-220 for wider discussion and examples). Woolf has applied a similar argument to explain the popularity and design of Jupiter columns to the culturally distinct communities of the Roman Empire (Woolf 2005). The notion of similarity through difference is yet another illustration of the way in which agents act as embedded individuals, and highlights how, through the examination of actions in context, 'agency' cannot only be better identified, but can also become archaeologically meaningful (Barrett 2000, forthcoming, Dobres and Robb 2000). The local variation in layout, orientation, and segmentation format also highlights the limitations of binary oppositions, so frequently employed in the interpretation of spatial relations in Iron Age 'roundhouses' (as discussed in Chapter 4).

The decisions involved in the building and transformation of courtyard houses drew upon wider temporal relationships. In creating or transforming courtyard house structures, relationships with past traditions of building and of layout, associated with previous generations, could be reformed and reiterated. Active acts of remembrance were involved in the remodeling and construction of courtyard house structures: remembering events of construction both within living memory and as part of wider temporal traditions, which paralleled relationships with individuals of past and present. The transmission of spatial and temporal knowledge and understanding, involved in the very fabric of courtyard houses, determined their architectural role as expressions of complex identities at multiple scales, at any one time. This is not only true for courtyard house structures but, as the most distinctive, architecturally monumental and geographically localised settlement type of the period it is a point more clearly observable in relation to them.

7.3 Interpreting 'round' settlement

Rounds have been identified as the dominant settlement form in Cornwall during the Later Iron Age and early Roman period. Typically, rounds appear to contain (at any one time) between three and five structures which could be identified as 'dwellings', alongside other 'subsidiary' structures. These univallate enclosures have been suggested to represent, in most instances, an 'extended household'. The scale of such a group falls above that of a single courtyard house structure, but below the numbers of households most frequently featured within 'courtyard house settlements'. Like courtyard house structures, and courtyard house settlements, the communities of rounds appear to have been relatively self-sufficient; frequently situated within associated field systems and displaying on site a range of evidence for mixed farming, food processing and frequently, small-scale metalworking and pottery production. For communities of the round, the scale of everyday social reproduction, of identity and social organisation within the landscape, is thus suggested to have operated primarily at the scale of the extended household.

Once again, identity at the scale of the extended household appears to have been supported by actions that utilised the physical representation of the social unit – notably the enclosure boundary. It was in association with this structure that a number of depositional acts can be witnessed that involved material associated with the recent past. This symbolic material had the potential to unify identity via the notion of a common origin and it is notable that for rounds, actions involving this material were prominent around the enclosure boundary, as opposed to the walls of internal structures which would equate more closely to the patterns of deposition witnessed amongst courtyard house settlement.

The spatial organisation of rounds, it has been suggested, is reminiscent of that witnessed within courtyard house structures. Buildings within the round hug the periphery of the enclosure, leaving an open 'central' area. This allows for the

suggestion that the spatial ideology developed within the courtyard house structure was local in origin. The spatial values of the courtyard house, it is argued, would have been a more intensive and complex version of those that developed earlier, and were experienced within the more openly settled interiors of some rounds.

7.4 Hillforts, cliff castles, open settlement and ambiguous ‘enclosures’

In Chapter 2 the complexity of the settlement record was recognised, as were specific issues which left certain sites straddling ‘type-site’ categories. Clearly, many of the hillforts and cliff castles in the dataset were occupied for periods of time, but the overall impression from these structures is that whilst some were occupied for longer periods of time, many were only occupied for short periods - some apparently seasonally. This, combined with evidence for ‘unfinished’ hillforts and the recent critiques of elite hillfort occupation elsewhere in Britain (e.g. Hill 1996; Stopford 1987) would seem to suggest that hillforts and cliff castles and played, for the most part, a slightly different role in society from the permanently occupied and ‘domestic’ rounds and courtyard house settlements, and in some instances entertained groups of people that were larger than those inhabiting rounds and courtyard house structures.

Clearly, the Iron Age peoples of Cornwall must have organised themselves, for certain events, at a scale larger than that of the household, extended household or small social group. In the previous chapters, a case has been made for cliff castles, hillforts, and some of the more unusual contemporary sites within the region (e.g. enclosures such as St Mawgan-in-Pyder and Carvossa) to have performed a significant role in such gatherings. These sites were not ‘centres’ in the traditional sense, as they may only have been utilised by specific groups at certain times of the year or in relation to particular transhumant events. Indeed, it may have been the ability of these sites to facilitate the coming together of disparate groups of people –

their peripheral nature, as opposed to their central position – that made them compatible to this role.

The evidence for this scenario is discussed below, but it includes the fact that these sites also contained some of the most elaborate LIA and early Roman material found in Cornwall. The suggestion here is that at times when the community gathered into a larger collective, material relating to the changing social conditions of the region would be brought to facilitate the better understanding or interpretation of social change (e.g. Hunter 2001). The temporary gathering of groups of households or parts of households would have allowed the social group to negotiate their position, as a ‘community’, within the wider contacts maintained with the Mediterranean, and peoples of the Atlantic seaboard. In the Iron Age burial record for the region, social differentiation does not appear to have been displayed in the deposition of material wealth (Ashbee 1979; Nowakowski 1991; Whimster 1977, 1981).

Indeed, in Iron Age and early Roman Cornwall, status and identity is arguably demonstrated more through the negotiation of built space and spatial relations than it is through the conspicuous consumption of material wealth. As such, certain exotica may well have had a more prominent role in the negotiation of wider group identities than it did in the elevation of personal or household status. This impression is supported by the evidence for coin deposition, in both the Later Iron Age and early Roman periods. Coin ‘hoards’, where present, occur at the larger sites (e.g. Carn Brea, Trevelgue) – interpreted here as community locales – and were scattered over and around structures (Mercer *et al* 1981; Nowakowski 2000). In the later Roman period, scatters of coins are also found scattered within rooms of the only Roman ‘villa’ in Cornwall, at Magor Farm near Camborne, as an apparent act of abandonment (O’Neil 1933). This is interesting as it implies a continuity of local practice at one of the only ‘classic’ Roman sites in the region. There appear to have been very few actual right angles in the construction of this building, and the

feeling offered by this site is one of local adaptation and interpretation of a Roman 'ideal' (see Fig. 2.1).

The defensive role of cliff castles has been deconstructed and an argument made for the use of these 'type-sites', as locales where relationships with conceptual distance, and with distant people and places (both geographically and temporally), were recognised, re-established and understood. This argument draws in part from the evidence for burial and/or acts associated with funerary rites, identified at certain sites, and from the landscape position of cliff castles, liminally located between land, sea and sky (Cripps & Giles forthcoming).

Cliff castles also have associations with large-scale metalworking. This activity has been argued to have been a socially peripheral practice, lending itself to geographically liminal locations (Sharples forthcoming). Where we do have evidence for larger and more permanent structures at cliff castles, such as at Trevelgue, the structure is massive - the largest within the dataset and comparable with the largest structures in Britain at this time. This once again points toward the coming together of groups of people at a scale larger than those at which practical everyday identities and actions were forged.

7.5 Deposition and identity

Evidence from the nature and location of deposition has been suggested to support the arguments made above regarding both the primary scale of identity, and the nature and use of differing settlement types. Deposition at or just beyond, enclosure boundaries has been highlighted as a significant trend amongst non-courtyard house settlement. This frequently involved material of some age. These deposits, it has been argued, relate to the construction of a cultural memory regarding the origins or heritage of the resident group. These types of deposits, along with associations to

ancient monuments such as barrows and quoits, are a more frequent occurrence at hillforts and cliff castles which, in line with the argument above, relates to the construction of identities pertaining to temporary and larger composite groups formed from many households. It is for this reason, perhaps, that in these examples, events of re-use or reference draw upon elements and material from the distant or mythical past, for it was this kind of 'history' that could be best appropriated for the cultural memory of larger composite groups.

At Castle Gotha round, the depositional event at the enclosure boundary also drew upon material from the distant past, but this was teamed with sequences and actions within the interior relating to the more immediate past. The structured deposition of, referencing of or association with, events or material associated with the more recent or immediate past (or 'genealogical histories') is more evident at rounds, courtyard house structures, and some of the larger enclosures of the early Roman period. This, it has been argued, is due to the scale of identity in operation at these sites, at the level of the household rather than a larger composite group. The composition of the household, by definition, also makes histories built upon notions of lineage and genealogy more suitable and viable.

It is important to reiterate that the interpretation of this kind of evidence is always going to be tentative, but with the nature of biases in both preservation and deposition, the line at which 'coincidence' becomes meaningful action is, for me, one that justifies considered speculation. Similarly, the model outlined above identifies a possible trend in the nature and reiteration of identities and social structures in Iron Age Cornwall, but as a model, it does simplify the evidence to a certain degree. Having said this, it is still a model that I feel deserves future consideration and investigation.

7.6 Hierarchies and heterarchies

Why does the presence of elaborate material at certain sites, argued above to have been ‘community’ locales, not instead indicate some form of resident elite and associated social/settlement hierarchy? In the first instance, I wish to draw again upon the differing scales of identity that, it has been argued, were being expressed at these different types of sites. Sites such as Carvossa, St Mawgan-in-Pyder or Castle Dore appear to have embraced a much larger scale of social grouping but do not reflect any great differences in size or form in architecture and if anything, reflect more frequent re-building and ‘temporary’ residency. The second key point is that the utilization of the past at these sites appears in relation to the enclosure, as opposed to the structures within. This, it is argued, reflects the desire to re-establish or reiterate wider ‘community’ identities with reference to a unifying ‘distant’ past; a scale of identity that does not operate on a regular daily basis.

If trading contacts along the western Atlantic seaboard were also organised at a very local level – at the scale of extended household or small group – the meeting of the wider community would have brought together differing accounts of trade, the peoples with whom trading took place, and the lands from which they came. It may also have brought together differing material from these areas (as described above) and knowledge of differing cultural traditions, such as the nature and use of domestic architecture and space. This suggestion is examined in more detail below, where the nature of Atlantic seaboard communication is considered further.

This latter point brings us to the third and most important conclusion that is drawn from the arguments presented in this thesis. With the primary scale of identity and social organisation operating at the scale of the household or extended household, I do not envisage the Later Iron Age and early Roman period in Cornwall as a hierarchy, but as a heterarchy. Indeed, it is only within a heterarchy, that communal ‘centers’ such as those interpreted above would operate and attract the elaborate

material culture they produced in excavation. The social organisation of Cornwall in the period after the Roman invasion of Britain is a potentially more complex topic and is discussed separately below. The following discussion of heterarchy will focus upon Cornwall in the Later Iron Age.

7.6.1 Discussions of heterarchy

‘Heterarchy’ has become something of a buzz word in Iron Age studies recently, although specific discussion of the social mechanics of this form of organisation is limited. Heterarchies (as outlined in section 1.2) describe complex frameworks of horizontal social stratification, whereby ‘power’ and control is shared across a number of individuals who draw support for their position from a community majority (e.g. Paynter 1989). The benefit of the community, to differing degrees, is pursued over the benefit to any individual(s) and the power to remove support for any ‘leader’ who does not follow this line remains with the community itself. Heterarchies are documented in many small scale societies across the world but may not be particularly stable social structures over the long term. Heterarchies thus reflect a number of diffuse and small scale hierarchies across a range of areas of social control, within essentially ‘egalitarian’ communities: ‘social differentiation precedes the institutionalisation of inequality and hierarchies exist in egalitarian contexts’ (Paynter 1989: 387).

One of the earliest considerations of heterarchy in Iron Age studies was published by Crumley (1995a, 1995b), in which the problems inherent with the conflation of complexity with social hierarchy were identified, resulting in the importation of models of hierarchical social stratification ‘which effectively obviate other definitions of power as well as the role of individuals’ (Crumley 1995a: 30). Crumley’s proposition of heterarchy recognised, in theory at least, a multi-faceted stratification to society. Elements within a system are ‘unranked relative to one

another or ranked in a variety of ways, depending on conditions' (Crumley 1995a: 30). This situation allows for communities to be stratified across many different axes, and for these to be related in different ways at different times. Within Crumley's (1995a) case study, economically determined hierarchies are not, she suggests, given primacy over other potential determinants of social stratification. However, within this application of heterarchical theory, assumptions of scale do appear to result in the advancement of hierarchical relations and economic concerns over horizontal stratification. Similarly, within Hayden's (1995, 2001) advocacy of transegalitarianism (a term for social structures apparently comparable to heterarchies), economic concerns are openly admitted to being given primacy over other forms of social differentiation.

Paynter (1989: 378) has discussed how the concerns of the 'New Archaeology' – in cross-boundary, large-scale processes – have been the necessary result of the continuation of traditional neo-evolutionary approaches to social stratification, complexity and the scale of social structures. The fact that more recent shifts in scale toward regional studies of the Iron Age have retained more established approaches to the examination and discussion of social structures and hierarchies, may explain the problems observable in the reconciliation of two.

7.6.2 Heterarchy in the Iron Age

Attempts within anthropology to develop more sustainable models of social stratification have sought to understand the ebb and flow of social inequality and have recognised horizontal relationships of equality and inequality that are viable within 'egalitarian' communities. In his discussion of inequality, Paynter (1989: 370) highlights differential access to strategic resources as a means of giving those individuals with access control over the actions of others. Crucially however, differential access is recognised as not always having to result in social inequality.

Paynter suggests that differential access to different resources can empower individuals, but that the latent potential to extend individual power can result in a stable egalitarian structure. The ability of any individual to opt out of this structure retains a level of group co-operation and concern for group success. The potential for the rest of the group to join against any individual who did opt out of the structure must also have added an element of group control:

‘While egalitarian societies empower the individual, they offer individuals less opportunity to wreak havoc than is found in contemporary stratified societies’

(Paynter 1989: 381).

This view flirts dangerously with the traditional view of ‘egalitarian society’ which equates ‘egalitarian’ with the ‘safe’ negotiation of equal relationships. ‘Egalitarianism’ (Paynter’s term) does not need to deny the potential for social inequality, or indeed, the existence of stratification within society. Rather it offers a different kind of mechanism for the control of society – a group approach to the control and division of tasks. This form of complex egalitarianism, dominated by unequal horizontal relationships, is best reflected by the more recent term ‘heterarchy’.

When the scale of inequalities of power, age, or experience for example, are reduced and incorporated *within* an overarching horizontal structure, rather than being allowed to dictate the structure, communities can act as cohesive units without the need for a single leader or dominant social hierarchy. This may produce a factional, political and turbulent social structure at times, but it is one that operates, for the most part, at a small-scale and retains an overarching concern for the benefit of the group as a unit, as this is the foundation for control.

This situation is also reflected in the burial record for the region, with both cist and flat cemeteries present, both of which appear to have been organised around kin lines and household groups (Ashbee 1979; Nowakowski 1991; Whimster 1977, 1981). Although socially stratified there is no visible evidence for overt hierarchy. Similar heterarchical social structures are now starting to be suggested for other Iron Age communities of Britain (Hill forthcoming) and north-western Europe (Sastre 2002). This is the kind of social structure I believe operated within small-scale communities across Cornwall in the Later Iron Age, and is the best explanation for the patterns of space, time and material culture presented in this thesis.

7.7 Western Atlantic identities

There has, for some years now, been a growing consensus that the regions of western Scotland, Ireland, Wales, Cornwall, Brittany and Iberia constituted, during the Iron Age, developed ‘western Atlantic identities’ (Cunliffe 2001; Henderson 2000a, b, forthcoming). The basis for this notion has already been summarised (see Chapter 1).

Within this thesis, the recognition of the variety and difference of the archaeology of Cornwall, in relation to the other regions of the western seaboard, has been central. Whilst at a broader scale, a level of uniformity can be recognised in, for example, the presence of massive stone-built architecture within these regions, such an interpretation hides the fact that many other forms of varied settlement also exist and are frequently combined in ways that are unique to a particular region. Although the notion of a ‘western Atlantic identity’ may at one scale be accurate – how meaningful is this notion to our understanding of Iron Age communities of north-western Europe? The spatial analysis of Later Iron Age and early Roman settlement in Cornwall has sought to illustrate how, given a contextual examination

of space and time within sites, and then between sites, subtle and detailed interpretations of the mechanics of community identity and organisation can be proposed. When the archaeological record is considered in this detail, I would argue, the lines of comparison drawn to interpret a 'western Atlantic identity' become less convincing.

Having said this, similar patterns in the manner and use of built space and spatial relations are evident along the Western Atlantic seaboard. This does not necessarily reflect a consciously crafted 'identity' as such, but rather similarities (and subtle differences) in the trajectories taken to a range of potential influences, received from contact and trade along the seaboard, as well as a number of shared environmental and resource-based opportunities that result from living in a coastal or maritime region (Henderson 2000b: 149-150). These seaboard identities were locally crafted and strongly shaped by their landscape and coastal environments.

As has already been discussed, there are a number of potential parallels to courtyard house settlement forms from the British Isles. None of these parallels are contemporary however, implying that the nature and layout of a courtyard house is somewhat of a natural culmination of a particular set of social and environmental circumstances. The most similar parallel for courtyard houses from the western Atlantic seaboard are the later, 'figure-of-eight' houses from the Western Isles (Neighbour & Crawford 2001). Similarities in the nature of spatial segmentation have also been recognised in Scotland, and in Ireland, with 'figure-of-eight' structures from Navan and Knockaulin (Lynn 2003: 47).

From these examples, the segmentation and layout of the courtyard house structure is suggested to be part of a more universal spatial phenomenon. In support of this argument, a number of architectural examples that draw upon similar ideologies of built space can also be identified along the western seaboard. The agglomeration of circular structures – forming segmented architecture, similar in nature to sites such

as Bosulow Trehylls for example, also develop within the Castros of north-western Iberia in the LPRIA and early Roman period, as do rectilinear architectural forms (e.g. da Silva 1995: 274-282). This evidence is interesting if we consider another key contemporary parallel, suggested for the courtyard house: the Italian atrium house. This structure used the architectural control of space and movement to facilitate a complex set of social relationships and traditions; the '*salutatio*'. Although a similar set of hierarchical spatial relationships are not suggested for courtyard house communities, a knowledge and awareness of the way in which space was used to structure social relations so definitely, it has been argued, may have been a significant contributing factor to the local development of courtyard house structures from around the 2nd century BC.

Such a situation, which envisages trade and exchange occurring at a local scale and within a heterarchical social structure, builds upon the notion of discrepant identities in provincial Rome (e.g. Mattingly 2004). Indeed, this perspective - that the varied and often regionally diverse provincial Roman identities increasingly recognised, are the result of localised trajectories of contact and influence within a Roman Empire within which identity itself was multi-faceted, complex and inherently discrepant - has become a frequently appearing argument more recently amongst Iron Age and Roman archaeologists (e.g. Mattingly 2004, 2006; Sweetman 2005). If the argument above can be sustained for the development of courtyard house form, it can be regarded as closely comparable to the way in which the Italian open courtyard structures (Wallace-Hadrill 1997) are suggested to have combined Hellenistic forms of 'peristyle'; as an purposeful and active adoption of an external form, in an attempt to facilitate new configurations of power. The conscious combination of these features, in certain contexts and along different temporal trajectories reflects, it is argued, 'a constant play between the traditional and the exotic that acts as a powerful tool for social differentiation and control' (Wallace-Hadrill 1997: 240).

It may also be no coincidence that courtyard houses occur in the uplands of West Penwith, a significant source for some of the only tin resources in Britain. As is discussed below, tin appears to have been one of the major resources from Britain that was of interest to Rome, and its trade was crucial in defining the significance of south-west Britain within Western Europe. The presence and trade of this commodity may have been a key to pre-conquest contacts between Cornwall and the 'Romans'. This interpretation also seems more plausible in light of the narrative for heterarchical social structures offered above, where communities were organised primarily at the scale of the household, extended household or small social group. Furthermore, the nature of Roman 'control' of the region (or rather the lack of it), witnessed after the Roman conquest, would appear to argue against any centralised control of trade in the LIA. This latter point is now discussed below.

7.8 Cornwall in the early Roman period

The current perception of social organisation and social structure in Cornwall during the early Roman period is formed largely from a distinct absence of regional evidence from the period, and a detailed knowledge of the manner in which Rome exploited and governed other areas within its provinces. Of central importance in Roman expansion were the natural resources that could be reaped from conquered lands (Mattingly 2006: 491). Cornwall and Devon are the only locations in the British Isles with natural resources of tin, as well as having some gold and lead. Discussions of Cornwall's socio-economy, for all periods, has been structured in part around the evidence for, and organisation of, tin and other metal resources – and interpretations of Cornwall during the Roman period are no different in this respect.

As has already been outlined, during the LPRIA, Cornwall's economy is dominated by mixed farming regimes at the scale of the household and extended household,

and the localised small scale extraction and manufacture of clays and tin. In the Roman period, the absence of any change in the archaeological record implies that this situation continued to be the case; the local economy apparently retaining a localised and small scale focus (Gerrard 2000: 23). This simply does not marry with our traditional understanding of Roman provincial rule however, and as such, several different explanations for the nature of Roman governance and exploitation of Cornwall's resources exist.

The evidence for the tin industry in Cornwall and Devon, from prehistory until 1700, has recently been summarised in some detail by Gerrard (2000). Although of limited extent, there is a degree of archaeological evidence which relates directly or circumstantially to the extraction of tin in later prehistory. The majority of this evidence involves material culture described in association with streamworks, although these finds often occurred some time ago and as such, specific contextual information is rarely available. Because of the nature of the artefacts it is fair to assume that much of evidence implies tin working during the Bronze Age rather than the Iron Age. Either way, Gerrard summarises the evidence for later prehistoric tin working within a single paragraph (Gerrard 2000: 15). Despite generalising accounts based upon the increased presence and use of tin and bronze that suggest tin extraction increased notably in the Later Bronze Age and Iron Age (e.g. Herring 1992), the actual evidence for tin extraction in the Iron Age is very limited, and this is something that requires our recognition and explanation.

The earliest textual evidence for possible tin exports from the south-west relate to the Iron Age trade. Herodotus wrote that he had no knowledge of the 'tin islands' (Cassiterides) 'whence the tin comes which we use' (Herodotus *Histories* 3.115). These islands are thought to most likely refer to Britain and if so, reflect some form of contact between the Mediterranean and south-west England. There is a degree of contention amongst Classical authors regarding the degree of wealth derived from Britain within the literary sources however (Mattingly 2006: 492). As with the

majority of classical sources, the texts referring to the tin trade are fragmentary; often written from at a distance to the event – both geographically and temporally; and frequently compiled without reference, from the comments of many different sources themselves. As such, these sources cannot be taken literally, but can offer a frame of reference against which one may wish to interpret or compare certain aspects of the archaeological record.

In a more specific discussion of the tin trade, Diodorus Siculus refers to Rome's good relations with the tin extracting communities of Cornwall (Belerion):

‘In Britain the inhabitants of the promontory called Belerion are particularly friendly to strangers and have become civilised through contacts with merchants from foreign parts...They prepare the tin, working the ground in which it is produced very carefully...They beat the metal into masses shaped like astragali and carry it to a certain island lying off Britain called Ictis, for at the time of the ebb-tide the space between the island and the mainland becomes dry and they can take the tin in large quantities over to the island on their wagons...On the island of Ictis the merchants purchase the tin of the natives...whence it is then taken to Gaul and overland to the Mediterranean’

(Diodorus Siculus 5.22).

The quote from Diodorus clearly has inferences for the way in which we might envisage the nature of social organisation and social contact in the LPRIA and early Roman period. Tin ingots have been found from both Cornwall and Devon, and whilst the dating of these is notoriously difficult, some must be of Roman date. Forty-four small ingots shaped like ‘knuckle bones’ – the shape of the ‘astragali’ described by Diodorus Siculus – were also recently found on a shipwreck site in Bigbury Bay (Fig. 7.0) south Devon, whilst a much larger H shaped ingot was

dredged from St Mawes harbour in 1812. The only probable tin ingot of pre-Roman Iron Age date was found at Castle Dore, whilst the fragmentary remains of an early Roman ingot were recovered from St Mawgan-in-Pydar (Threipland 1956: 76). Two ingots, one from Porthmeor and one from Chun Castle may also be late Roman, although they may be slightly later. Gerrard (2000: figures 16-19) has also identified many mortar stones attributed to the medieval period, but some of these are also reminiscent of Roman mortar stamps from Spain and could be Roman in date (Mattingly pers.comm.).

The case for the Roman exploitation of Britain rests uncomfortably upon these few comments from potentially unreliable 'contemporary' authors and a notably limited degree of archaeological evidence. This situation is in contrast to the other mineral rich areas of Britain which saw marked socio-economic change as a result of Rome's control of their natural resources; the gold mines at Dolaucothi in Wales, lead and silver mines in Derbyshire, North Wales, Shropshire and the Mendips and copper in Shropshire, North Wales and Anglesey all experienced major expansion under Roman control (Gerrard 2000: 22).

7.9 Alternative narratives of the early Roman period

Because of this varied but limited evidence, interpretations of the Roman control of Cornwall are often generated in relation to the ways in which Rome controlled or exploited her other provinces. Traditional accounts suggest that tin extraction in Cornwall was extremely limited in the early Roman period, due largely to the abundant resources of tin from the Iberian peninsula. It is only when this source began to drop in production that tin production in Cornwall is suggested to have increased, and even then, the amount achievable - mainly from tin streaming - is suggested to have been limited with tin recovery remaining a small scale and localised affair (Todd 1987: 231).

Such an interpretation fits with traditional accounts of Cornwall in the Roman period and goes some way to excuse the lack of Roman activity in the region by assuming the generally sluggish and backward nature of the Later Iron Age communities present – subservient and static, but with no real assets to provoke Roman interest. Comments, based upon an apparent absence of evidence, that travel through Roman Cornwall was limited due to ill maintained roads and trackways (e.g. Todd 1987: 217), highlights a generally lackluster approach.

Similarly, in Quinnell's (2004: 215-217) recent re-evaluation of Roman administration and control of Cornwall, traditional models of social organisation devised for regions elsewhere have been used to develop a generic socio-economic trajectory for Cornwall that defies the unusual archaeological record of the region. Until the 2nd century AD, continuity in the settlement record is used by Quinnell to suggest localised communities of some status in the rounds, with hillforts as communal centres, and the slightly more unusual enclosures such as St Mawgan-in-Pyder and Carvossa at the residents of a more powerful elite with whom, Roman administration formed an alliance (Quinnell 2004: 216). The size and nature of these structures are interpreted in terms of social and economic status, paralleling the more traditional interpretations of hillforts. After the 2nd century AD, when these two sites show a demise and/or abandonment, a reconfiguration of the region by Roman administrators is suggested by Quinnell, whereby a more egalitarian spread of power is linked to an increase in the number of rounds (Quinnell 2004: 216). After this reconfiguration, Roman administration is assumed to have operated as elsewhere, the evidence for which in Cornwall is as yet undiscovered (Quinnell 2004: 217).

An alternative narrative for this period in Cornwall has recently been advocated by Mattingly (2006) emphasising the potential loss of evidence of Roman extraction due to subsequent land-use and mining. The crux of Mattingly's argument suggests

communities of Devon and Cornwall), which if so would reflect more accurately the unique features of the settlement record for the region, already outlined in this thesis. As such the experiences of the Iron Age communities of Cornwall, of the early 'Roman' period might be expected to be different to the other regions of the south-western peninsula. The peoples of Cornwall in the early Roman period – possibly known as the 'Cornovii' Mattingly suggests – are unlikely to have been administered from the civitas of the Dumnonii at Exeter, and probably retained their own separate status under Roman rule (Mattingly 2006: 407). This would explain more fully the unique trajectories that local Iron Age identities in Cornwall developed during the early Roman period.

This narrative of Cornwall during Roman rule has some very positive and convincing elements. On the basis of present evidence however, it could also be argued that some of these propositions rely perhaps a little too much upon our expectation and understanding of Roman organisation gained from other regions. In the future and after more investigation, it may well be that a narrative of more familiar Roman exploitation is proven, but on current evidence, an alternative interpretation might also be postulated.

A heterarchical social structure has already been advocated for the Later Iron Age of Cornwall, and there is a certain degree of circumstantial evidence to support the suggestion that this situation may have continued, at least at first, into the early Roman period of the region. Traditionally, and for the majority of regions in southern Britain, the Roman conquest saw the affiliation or recognition of regional 'kings' or leaders by the Roman authorities (see Creighton 2000: 55-79 for discussion). In many instances it seems likely that those individuals chosen may have been one of several LIA tribal leaders in the region (Moore *et al.* forthcoming). A key reason for the Roman recognition of tribal individuals was to define geographical areas – by giving it a political and thus geographical boundary. In Cornwall, this process of alignment does not appear to have happened. This may,

in part, be because the boundaries of Cornwall were already well defined by the sea. Furthermore, as a peninsula there may have been no great need to lay the roads required to move through the region, and on to other areas. It may also however, be due to the heterarchical organisation of the region, as argued for above, which made Cornwall less 'unified' and thus, less of an apparent threat. These factors, combined with a Roman knowledge of the region and resident communities, gained from several centuries of localised trade and contact, may have resulted in Cornwall being left with virtually no military presence or overt Roman control, after the Roman invasion. This could have been a useful 'holding' situation, at least until the Roman control of southern Britain had become established.

7.10 Conclusions: An Iron Age-Roman transition or a Roman Iron Age?

The Later Iron Age – Roman transition is a key period for the examination of identity in Britain, and in Cornwall this transition period coincides with a settlement record that is remarkable for its continuity as well as its unique character. When compared with the rest of Britain, Cornwall is not only notable for its different forms of settlement, but also for its distinct lack of 'Roman' characteristics, such as 'forts', 'villas' or 'roads'. Thus, when 'Roman Britain' is under examination, Cornwall is often left out of discussion. Similarly, when it is the nature of Roman Cornwall under scrutiny, it is the evidence from elsewhere in Roman Britain, and the organisational framework that accompanies it that is invariably employed within interpretation.

The 'awkward' position of Cornwall in relation to the rest of Britain is well illustrated by the various distribution maps used in more recent summaries of the period which document particular 'Roman' traits (Fig. 1.2). I have argued that, by viewing Cornwall as a periphery of Roman Britain, the region has often been assumed to have been drip fed Roman traits from further east (particularly the

south-east). This perspective fails to understand the peninsula in context, and fails to give it its own trajectory of development. The certainty with which the south-western peninsula is understood in terms of the south-east during the early Roman period has, until more recently, been left unquestioned. Furthermore, the ‘certainty’ with which this narrative is offered for early Roman Cornwall leads to the extrapolation of this narrative back into the Later Iron Age. The terms of the Roman ‘model’ for social organisation, provides the framework for the interpretation of the LPRIA of the region.

‘To those whose ancestors inhabited the fringe of the Roman Empire, the idea of Roman rule, grim, efficient and often venial, is repellent; yet these were the chains which formed their character. The idea of Roman civilisation is alien and unwelcome, *but it is no bad standard by which to judge what came before and what came after*’

(Richmond 1965 my emphasis).

Although the statement above was written over forty years ago, it reflects, I feel, the assumptions that have until recently, remained inherent within the interpretation of Cornwall in the Later Iron Age and early Roman period. Cornwall in the Later Iron Age has traditionally remained peripheral, lacklustre and devoid of the cultural elements that make it familiar to archaeologists, in the interpretation of the Late Iron Age – Roman transition. This approach however, has failed to produce a narrative for the early Roman period that is ‘meaningful’; neither in terms of Cornwall’s ‘Later Iron Age’, nor in relation to the ‘Roman period’ in Britain.

The narrative proposed above, for the Late Iron Age and Late Iron Age/Roman transition in Cornwall not only draws to a greater degree from the scale of archaeological evidence that *currently* exists for these periods, but also places the emphasis for cultural development back to the local Iron Age communities from

which the 'Roman period' in Cornwall derived. For several years now, Iron Age archaeologists have been encouraged to think beyond the static models of hillfort-based social hierarchies that dominated our interpretations of Iron communities in Britain during the 1970s and 1980s. We need now to be open to the potential for Iron Age communities to have been much more complex and much more spatially and temporally aware, than we have traditionally given them credit for – the potential to have been more 'worldly wise'. This global enlightening did not arrive with the Romans. In Cornwall, a unique seaboard position provided the internal and external stimuli for a developed social framework that would extend into the Roman period of the region.

As Iron Age archaeologists, we still need to foster an academic mentality that views the Iron Age as 'different' (Hill 1989). The evidence for such an Iron Age is equally more complex however, and requires a more subtle approach toward its interpretation. This thesis has attempted to forward one potential line of enquiry that embraces this complexity; through the interpretation of space and time as interconnected and reflexive elements of spatial relations and identity.

In Time and Space.

Spatiotemporal Relations, Community and Identity in Cornwall, 400 BC – AD 200.

Volume 2



A thesis submitted for the degree of
Doctor of Philosophy

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School of Archaeology and Ancient History, University of Leicester

December 2006

List of Figures

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Chapter One.....245

Fig. 1.0 Regions of the Atlantic seaboard with defended homesteads.

Fig. 1.1 The distribution of Roman villas Romano-Celtic temples and principle Roman roads, towns and forts.

Fig. 1.2 Europe viewed from the Atlantic archipelago – highlighting the western Atlantic Seaboard.

Fig. 1.3 Suggested tribal divisions in Iron Age Britain.

Fig. 1.4 Map of Cornwall.

Fig. 1.5 Map of Key sites discussed in the text.

Fig. 1.6 Distribution of probable Iron Age/Romano British enclosed sites in Cornwall.

Fig. 1. 7 Distribution of probable Iron Age enclosed sites in Cornwall.

Chapter Two.....253

Fig. 2.0 Nanstallon Roman Fort.

Fig. 2.1 The Roman Villa at Magor Farm.

Fig. 2.2 Hut circles at Bodrifty.

Fig. 2.3 Catshole Tor.

Fig. 2.4 Garrow Tor.

Fig 2.5 Gold Park.

Fig. 2.6 Examples of ‘developed’ hillforts in Cornwall.

Fig. 2.7 Gradiometer survey of Gear hillfort.

Fig. 2.8 Hembury Hillfort.

Fig. 2.9 View from the interior of Trencrom tor enclosure.

- Fig. 2.10** Interior of Castle Dore.
- Fig. 2.11** Chun Castle.
- Fig. 2.12** The extant outer wall at Chun Castle.
- Fig. 2.13** Dun Aonghasa.
- Fig. 2.14** Interior plan of Killibury.
- Fig. 2.15** Castle-an-Dinas (St Columb).
- Fig. 2.16** Activity between the ramparts at The Rumps.
- Fig. 2.17** Examples of ‘rounds’ in Cornwall.
- Fig. 2.18** Plan of Structures and excavated areas at Trethurgy round.
- Fig. 2.19** Oval structures of Roman date in Cornwall.
- Fig. 2.20** Plan of Carvossa, Probus.
- Fig. 2.21** St Mawgan-in-Pyder.
- Fig. 2.22** Walesland Rath, Pembrokeshire.
- Fig. 2.23** Rathgall ringfort, C. Wicklow.
- Fig. 2.24** Small univallate enclosures from Brittany.
- Fig. 2.25** Plan of Gurnards Head.
- Fig. 2.26** View seaward at Gurnards Head.
- Fig. 2.27** Cliff castles in Cornwall.
- Fig. 2.28** Distribution of courtyard houses in Cornwall.
- Fig. 2.29** ‘Classic’ courtyard house design: CH1(i) at Chysauster.
- Fig. 2.30** Chysauster courtyard house settlement.
- Fig. 2.31** English Heritage reconstruction of a courtyard house.
- Fig. 2.32** Reconstruction of a courtyard house under a single roof.
- Fig. 2.33** Reconstruction of the figure-of-eight house at Great Berna.
- Fig. 2.34** Conjectural reconstruction of House Z2 at Trethurgy Round.
- Fig. 2.35** Porthmeor.
- Fig. 2.36** Examples of Cornish fogous.
- Fig. 2.37** Potential ‘above-ground fogou’ at Bosporthennis.
- Fig. 2.38** View along the long passage of the fogou at Carn Euny.
- Fig. 2.40** Map of Gündlingen type swords.
- Fig. 2.41** Trade routes in the early La Tène period.

Chapter Three.....	289
Fig. 3.0 Structures, Systems and Structuration.	
Fig. 3.1 Geo-visual representation of Hägerstrand's model of space-time and human action.	
Fig. 3.2 Access Analysis: plan of house and justified access map.	
Fig. 3.3 'Buildings as objects'.	
Fig. 3.4 Proposed theoretical and methodological framework for investigating spatial relations.	
Fig. 3.5 Excavated data: breakdown of dataset by site 'type' and chronological period.	
Fig. 3.6 Examples of scale plans of structures transposed onto graph paper.	
Fig. 3.7 Regression analysis for structural areas.	
Fig. 3.8 Percentage of error involved between values calculated for total area.	
Fig. 3.9 Bodrifty.	
 Chapter Four.....	 297
Table 4.0 Comparison of radius and external area for structures at Bodrifty.	
Fig. 4.1 Comparison of external structural diameters at Bodrifty and Gurnards Head.	
Fig. 4.2 Comparison of external areas of EIA/LIA structures.	
Fig. 4.3 Comparison of internal and external diameters of structures of LIA date.	
Fig. 4.4 Internal and total diameters of LIA/RB structures.	
Fig. 4.5 External areas of structures at St Mawgan-in-Pyder.	
Fig. 4.6 Comparison of internal and external diameters of RB structures.	
Table 4.7 Average structural diameters in Cornwall, EIA-RB periods.	
Fig. 4.8 A comparison of internal structural area, across chronological periods.	
Fig. 4.9 A comparison of total structural area, across chronological periods.	
Fig. 4.10 A comparison of internal structural area and settlement 'type'.	
Fig. 4.11 A comparison of external structural area and settlement type.	

Fig. 4.12 Comparison of structural areas: courtyard house structures and non-courtyard house structures of LIA-RB and RB date.

Fig. 4.13 Reconstruction of structures at Trethurgy.

Table 4.14 Range of wall width of stone-built structures at key LIA and RB sites.

Fig. 4.15 Construction designs EIA/LIA-RB periods.

Fig. 4.16 Breakdown of structural material and form for non-courtyard houses.

Fig. 4.17 Structural form and chronological period.

Fig. 4.18 Structural form and site type.

Fig. 4.19 Shape in plan and chronological period.

Fig. 4.20 Oval structures at Threemilestone round.

Fig. 4.21 Structure shape and internal area.

Fig. 4.22 Structural shape and total area.

Fig. 4.23 Entranceway orientation EIA-RB periods.

Fig. 4.24 Entranceway orientation categorised by period.

Fig. 4.25 Grambla and Trethurgy, displaying settlement around the periphery of the interior.

Fig. 4.26 Comparison of the internal layout of a typical round and a typical courtyard house.

Fig. 4.27 Central areas of focus at Porthmeor.

Fig 4.28 Distribution of structures within the interior: rounds.

Fig 4.29 Distribution of structures within the interior: enclosures.

Fig. 4.30 Hut V, St Mawgan-in-Pyder.

Fig. 4.31 Calculations of built space.

Chapter Five.....320

Fig. 5.0 Courtyard house design: courtyard, round room and circular/oval side chambers.

Fig. 5.1 Segmentation formats of discernable courtyard houses in West Penwith.

Fig. 5.2 Most common variations in segmentation format from dominants 1111 and 1101.

Fig. 5.3 Frequency with which specific numbers of each room type appear within a single segmentation format.

Fig. 5.4 Graph displaying the negative correlation between long rooms and circular/oval chambers in instances where the number of long rooms ≥ 3 .

Table 5.5 A comparison of the internal areas of circular/oval chambers and long rooms.

Table. 5.6 Location and frequency of hearths at excavated courtyard house sites.

Fig. 5.7 Hearth in the Long Room of Courtyard house 1 at Porthmeor.

Fig. 5.8 Rectilinear structure at Goldherring used for melting tin-ore.

Fig. 5.9 Segmentation formats at multiple courtyard house sites.

Fig. 5.10 Accretion and courtyardisation processes.

Fig. 5.11 Long room 1 of Courtyard House 1 at Carn Euny.

Fig. 5.12 Chronologies at Carn Euny.

Fig. 5.13 Lynchet running through Bosulow Trehyllys.

Fig. 5.14 Subdivided spaces; the long room and oval room of CH1(i) at Chysauster.

Fig. 5.15 Courtyard house CH1(i), Chysauster.

Fig. 5.16 Courtyard house 2, Bosulow Trehyllys.

Fig. 5.17 Entranceway orientation of courtyard house structures in Cornwall.

Fig 5.18 Entranceway orientation: courtyard houses and non-courtyard house settlement.

Fig. 5.19 Orientation around the courtyard of rooms and entrance.

Fig. 5.20 Orientation of rooms and entranceways around courtyard houses with segmentation format 1111.

Fig. 5.21 Orientation of rooms and entranceways around courtyard houses with segmentation format 1101.

Fig. 5.22 CH1 Chysauster, showing indirect line of sight from the entranceway to the round room, opposite.

Fig. 5.23 CH6 Chysauster, showing direct lines of sight from the entranceway through to the round room.

Fig. 5.24 'Figure.-of-eight' house at Bosta, Great Bernera.

Fig. 5.25 Jarlshof, Shetland.

Fig. 5.26 Central axes of view and movement.

Fig. 5.27 House of Paquius Proculus, Pompeii.

Fig. 5.28 Internal and total areas of courtyard houses.

Fig. 5.29 Comparison of internal area and segmentation format (formats with more than one structural example).

Fig. 5.30 Comparison of external area and segmentation format (formats with more than one structural example)

Fig. 5.31 Comparison of internal area and segmentation format (formats with a single structural example)

Fig. 5.32 Enclosed areas of courtyard houses with segmentation format 1101

Fig. 5.33 Enclosed area (internal and external) for courtyard houses with segmentation format 1111.

Chapter Six.....345

Fig. 6.0 Structure at Callestick.

Fig. 6.1 The geophysical plot from Castle Gotha.

Fig. 6.2 BA lynchet, re-used within the rampart of Maen Castle cliff castle.

Fig. 6.3 The suggested relationships between the scale of social group, location of action, and type of past being associated with.

Fig. 6.4 Tabulated evidence to support model 6.3.

Fig. 6.5 Stages in the construction and re-building of hut V, St Mawgan-in-Pyder.

Fig. 6.6 Iron pruning hook, deposited beneath the entranceway of house.

Chapter Seven.....355

Fig. 7.0 Tin ingots from the shipwreck in Bigbury Bay, south Devon.



Fig. 1.0 Regions of the Atlantic seaboard with defended homesteads (after Cunliffe 2001: 337).



a) Roman villas



b) Romano-Celtic temples



c) principle roads, towns and forts

Fig. 1.1 The distribution of a) Roman villas (after Millett 1990: 118) b) Romano-Celtic temples (after Millett 1995: 112) and c) principal Roman roads, towns and forts (after Millett 1995: 59). Cornwall is notable in being empty of any of these 'Roman' characteristics (with the one exception of the unusual 'villa' at Magor, nr. Camborne, highlighted in red); and yet is still discussed using traditional models and terminology used for other regions of southern Britain.

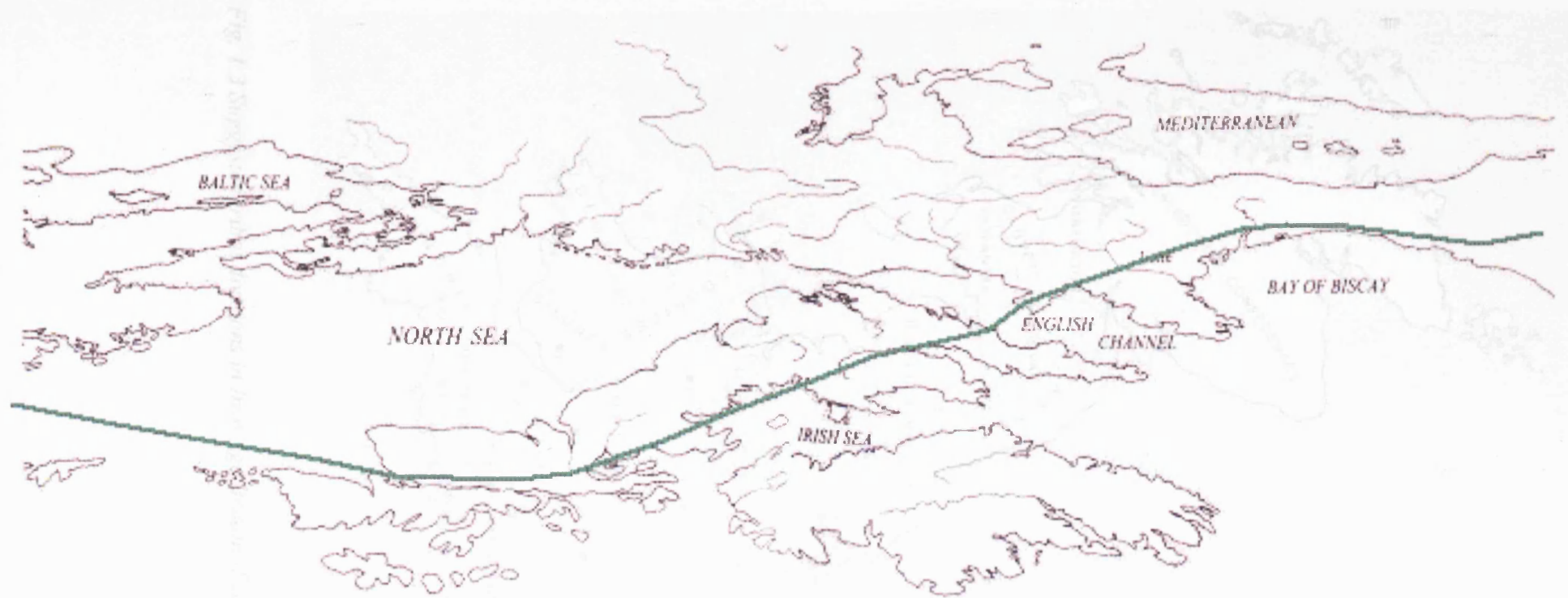


Fig. 1.2 Europe viewed from the Atlantic archipelago – highlighting the western Atlantic Seaboard (after James 1999: 14-15).



Fig. 1.3 Suggested tribal divisions in Iron Age Britain (Scullard 1986: 24).

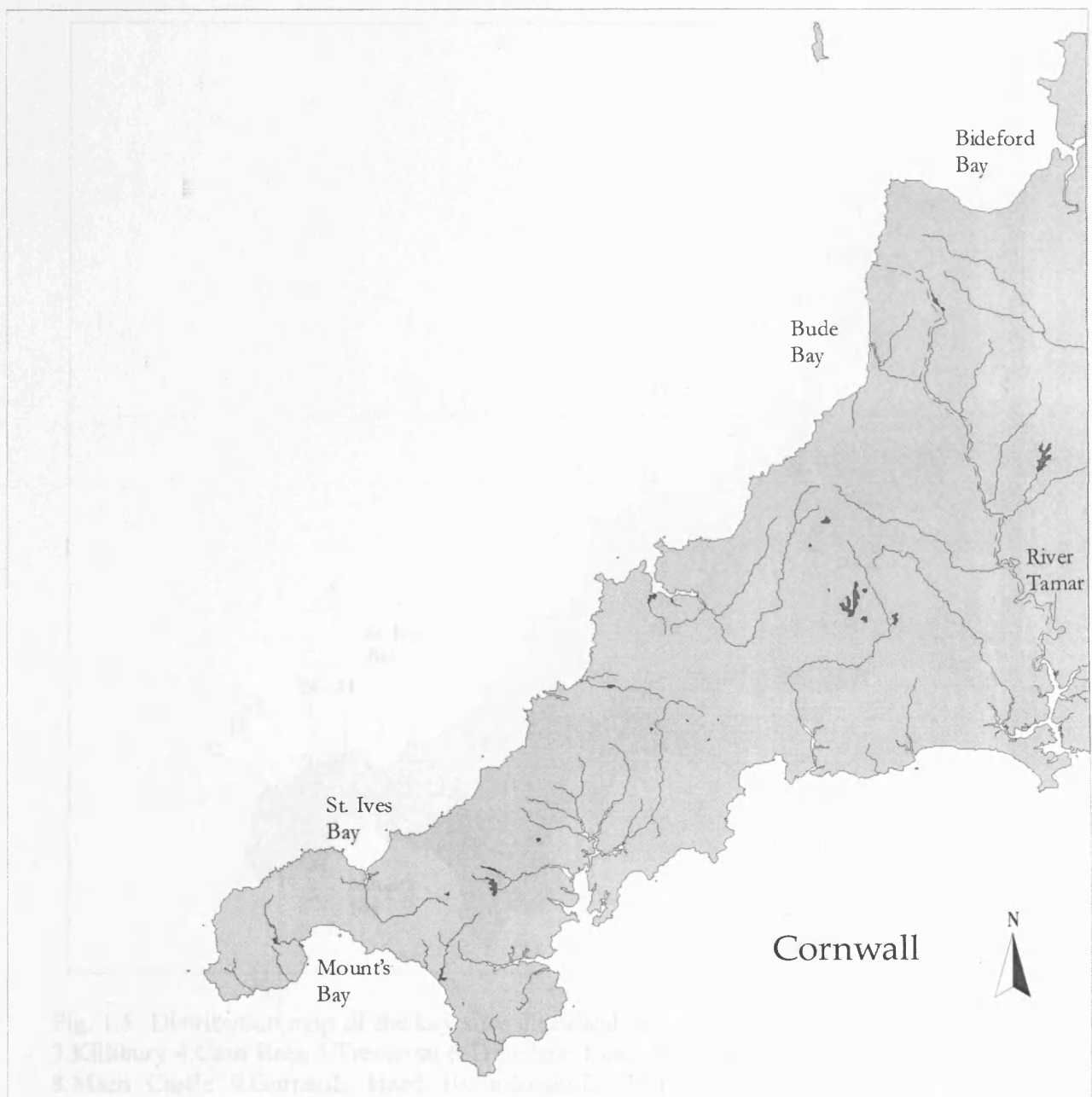


Fig. 1.4 Map of Cornwall

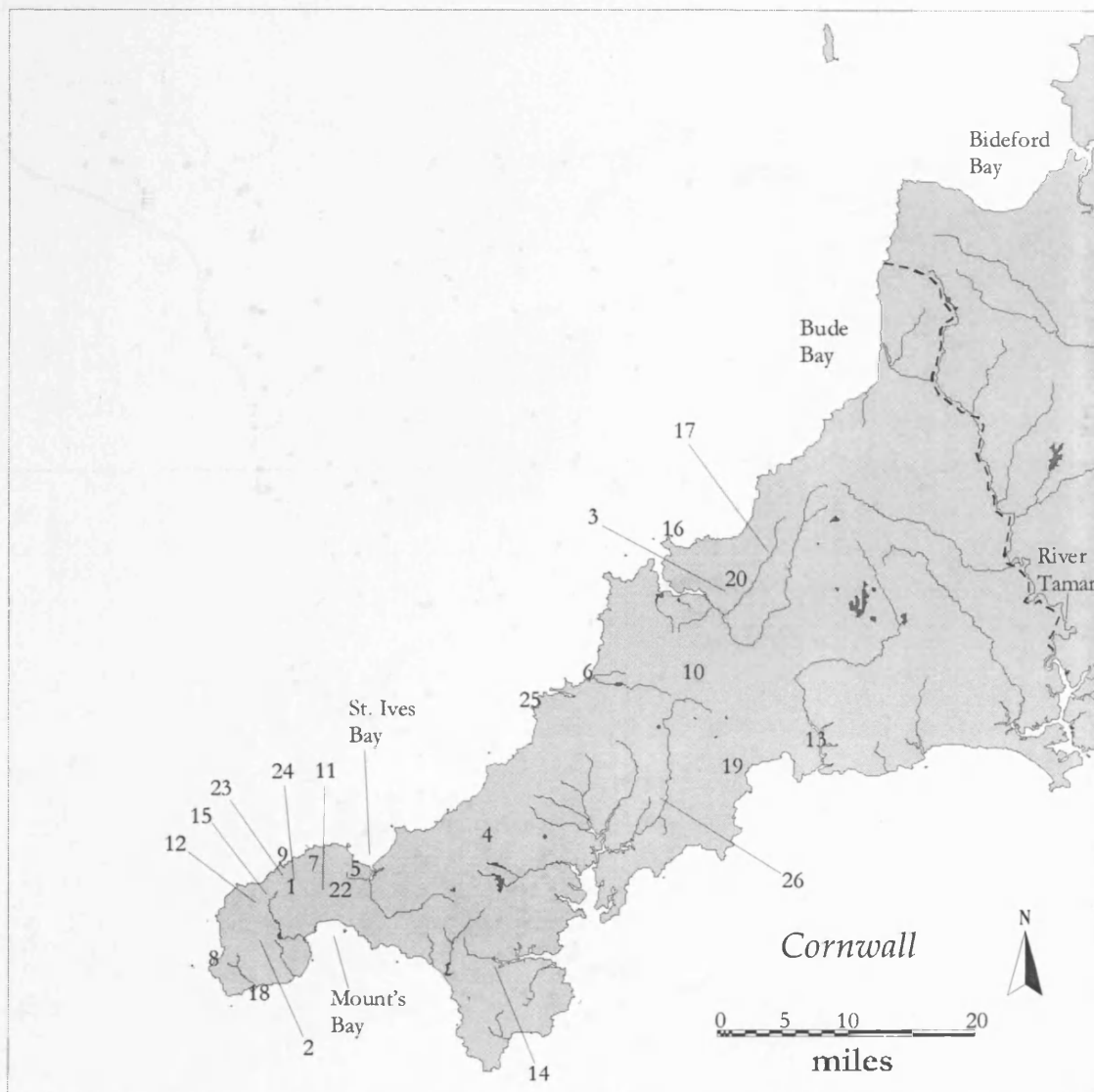


Fig. 1.5 Distribution map of the key sites discussed in the text: 1.Bodrifty 2.Carn Euny 3.Killibury 4.Carn Brea 5.Trencrom 6.Trevelgue Head 7.Wicca Round and Sperris Croft 8.Maen Castle 9.Gurnards Head 10.Castle-an-Dinas (Restormel) 11.Castle-an-Dinas (Penwith) 12.Chun Castle 13.Castle Dore 14.Gear/Caer Vallack 15.Bosulow Trehyllys 16.The Rumps 17.Tregeare Round 18.Treryn Dinas 19.Castle Gotha 20.Tregilders 21.Threemilestone 22.Chysauster 23.Porthmeor 24.Mulfra Vean 25.Penale Castle 26.Carvossa

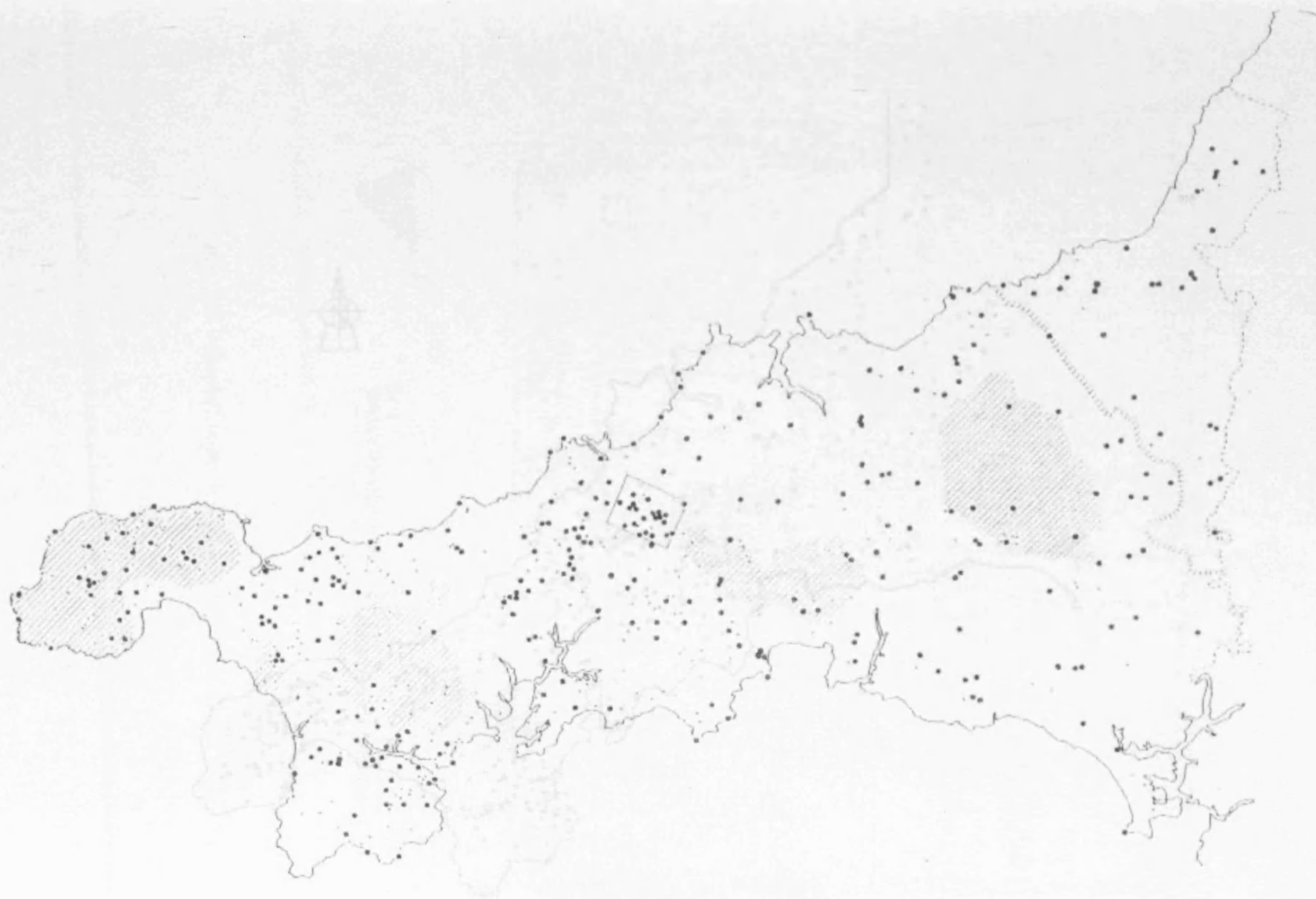


Fig 1.6 Distribution of probable Iron Age/Romano British enclosed sites, including rounds, hillforts and cliff castles (after Johnson and Rose 1982: fig. 1).



Fig. 1.7 Distribution of enclosed sites in Cornwall (after Bastide 2000: 22).

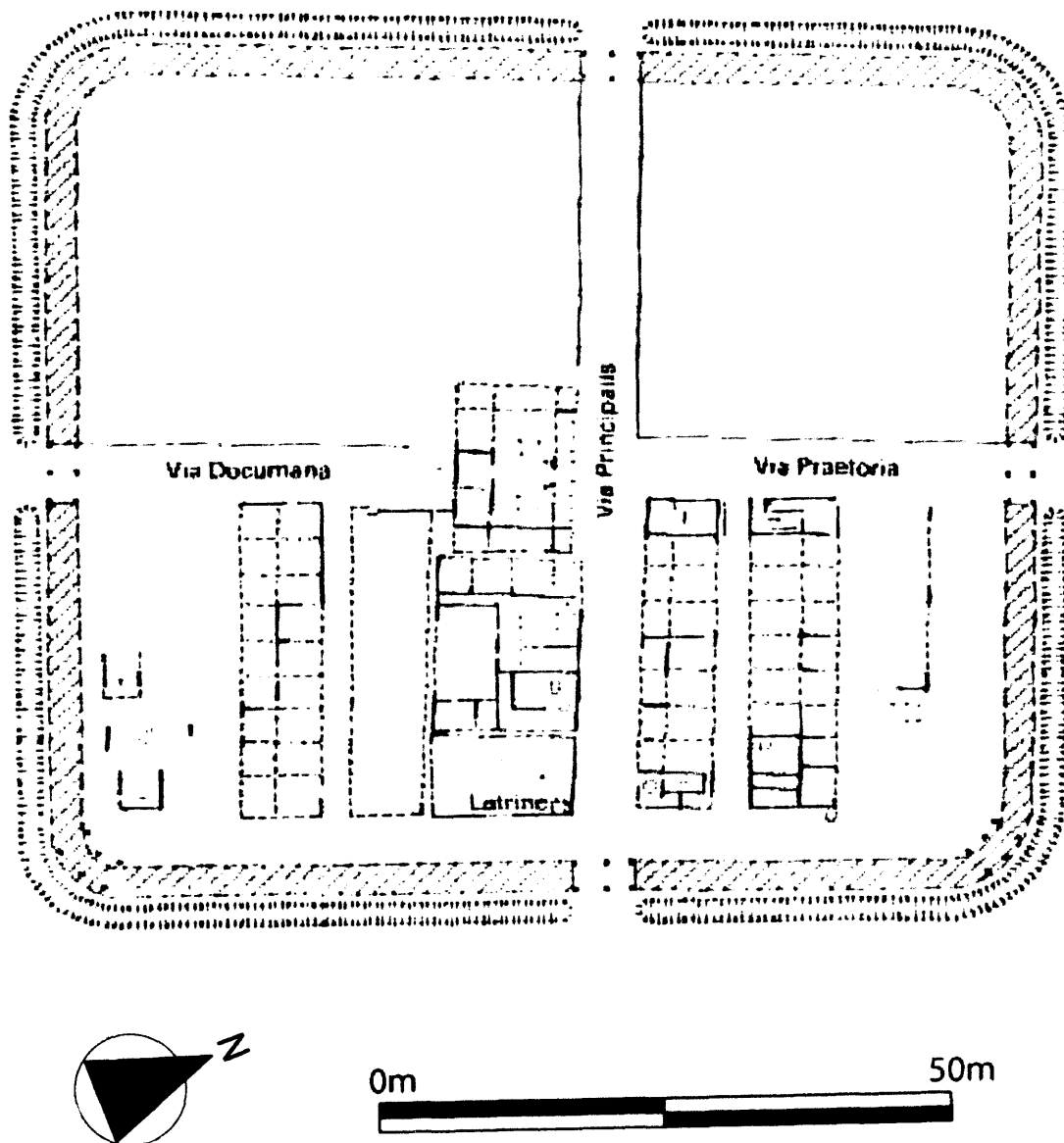
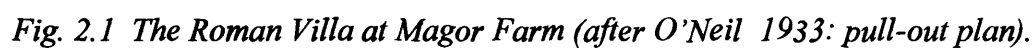


Fig. 2.0 Nanstallon Roman Fort (after Todd 1987: 201).



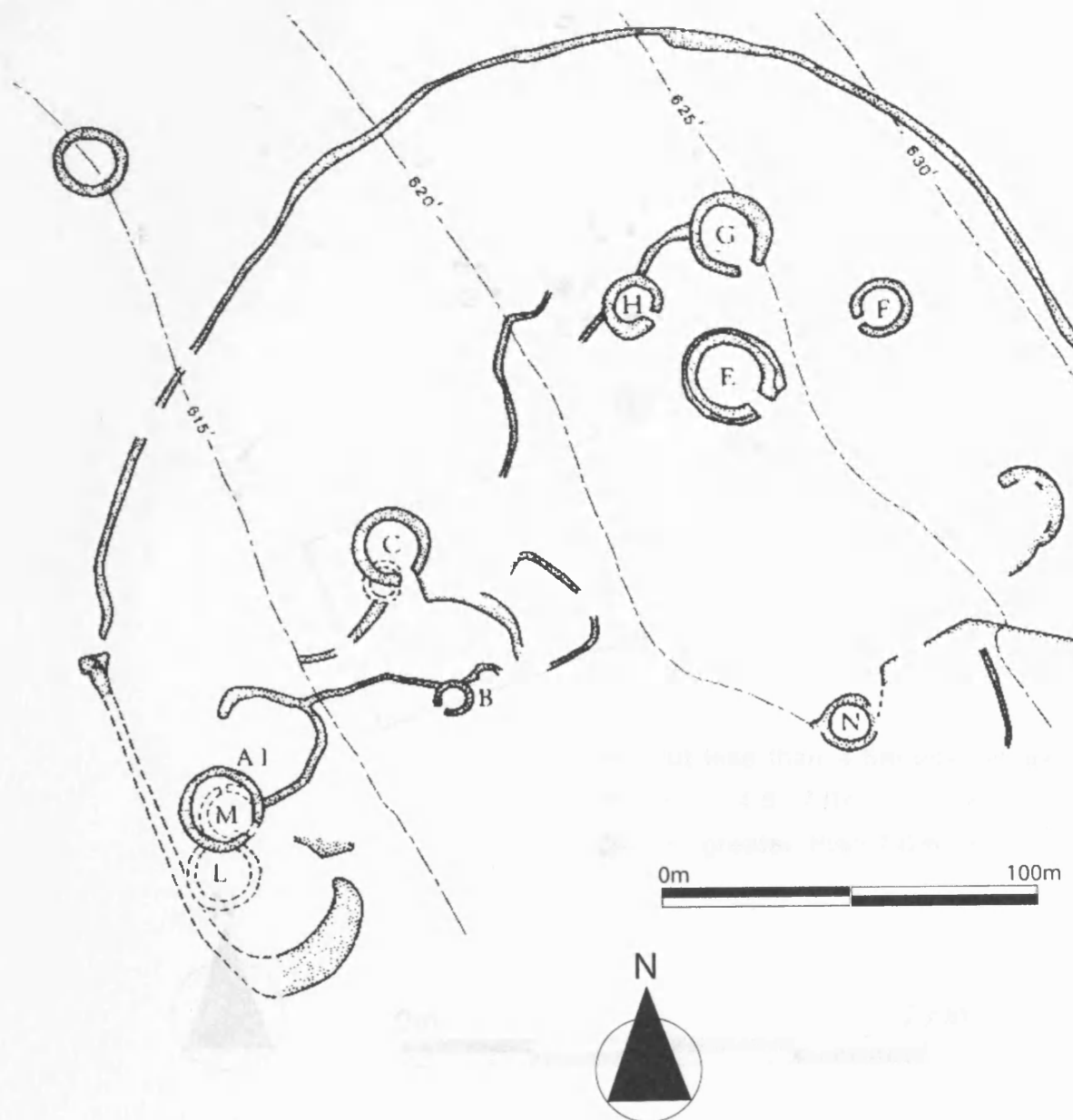


Fig. 2.2 Hut circles at Bodrifty (after Cunliffe 1975: 184).

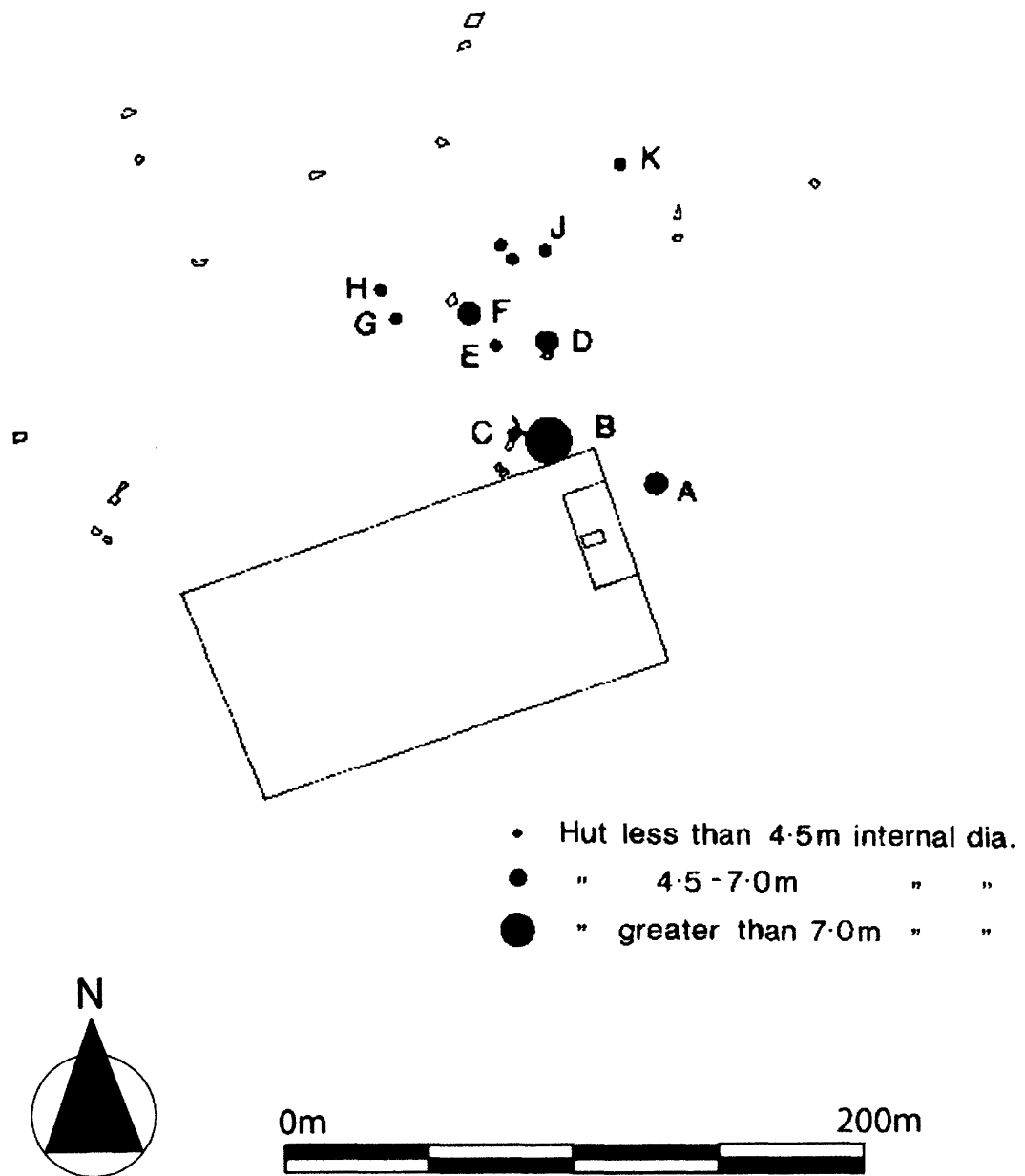


Fig. 2.3 Catshole Tor (after Johnson and Rose 1994: 57).

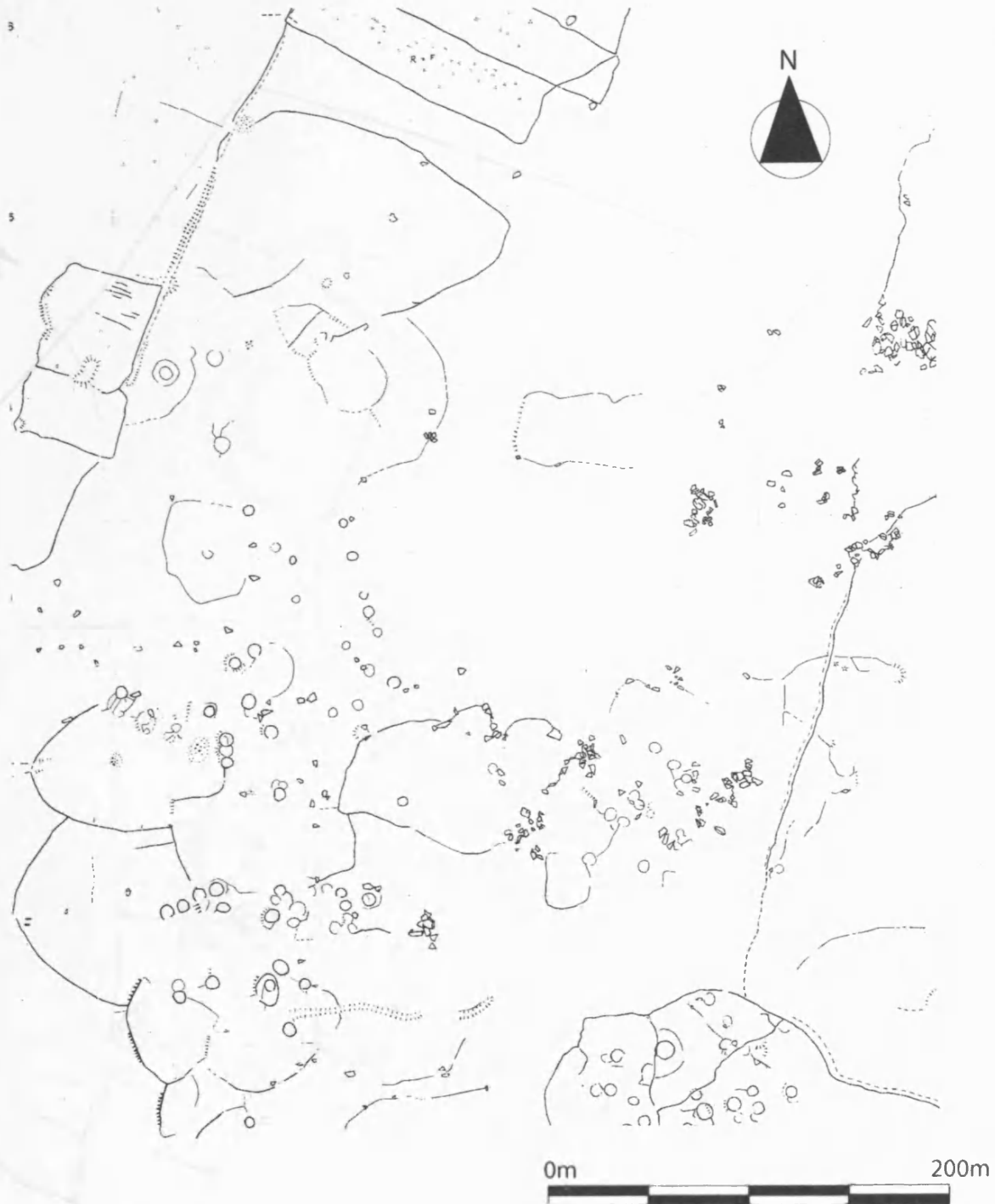


Fig. 2.4 Garrow Tor (after Johnson and Rose 1994: Fig 5, loose map).

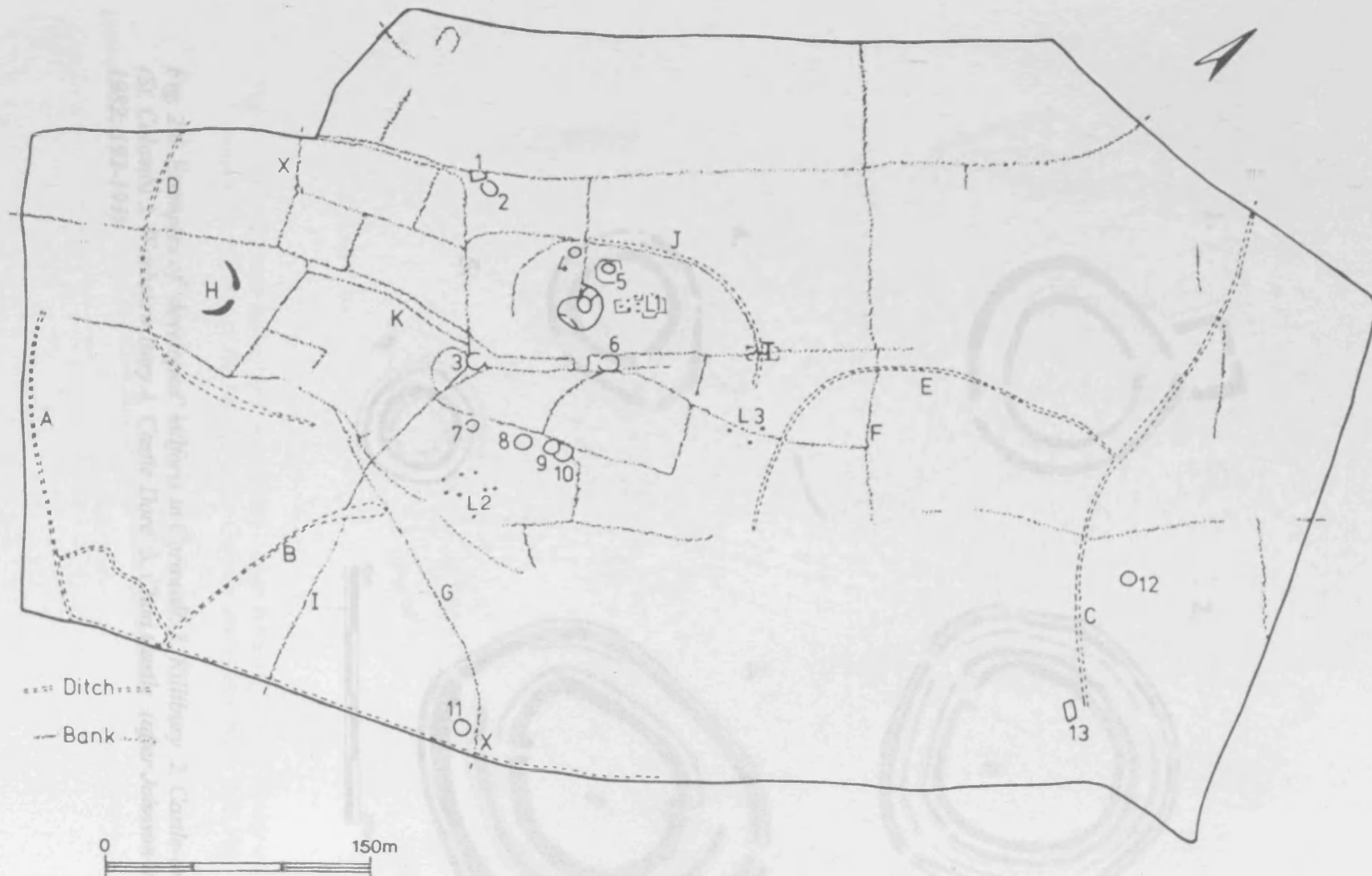


Fig. 2.5 Survey of Gold Park (after Gibson 1992: 23).

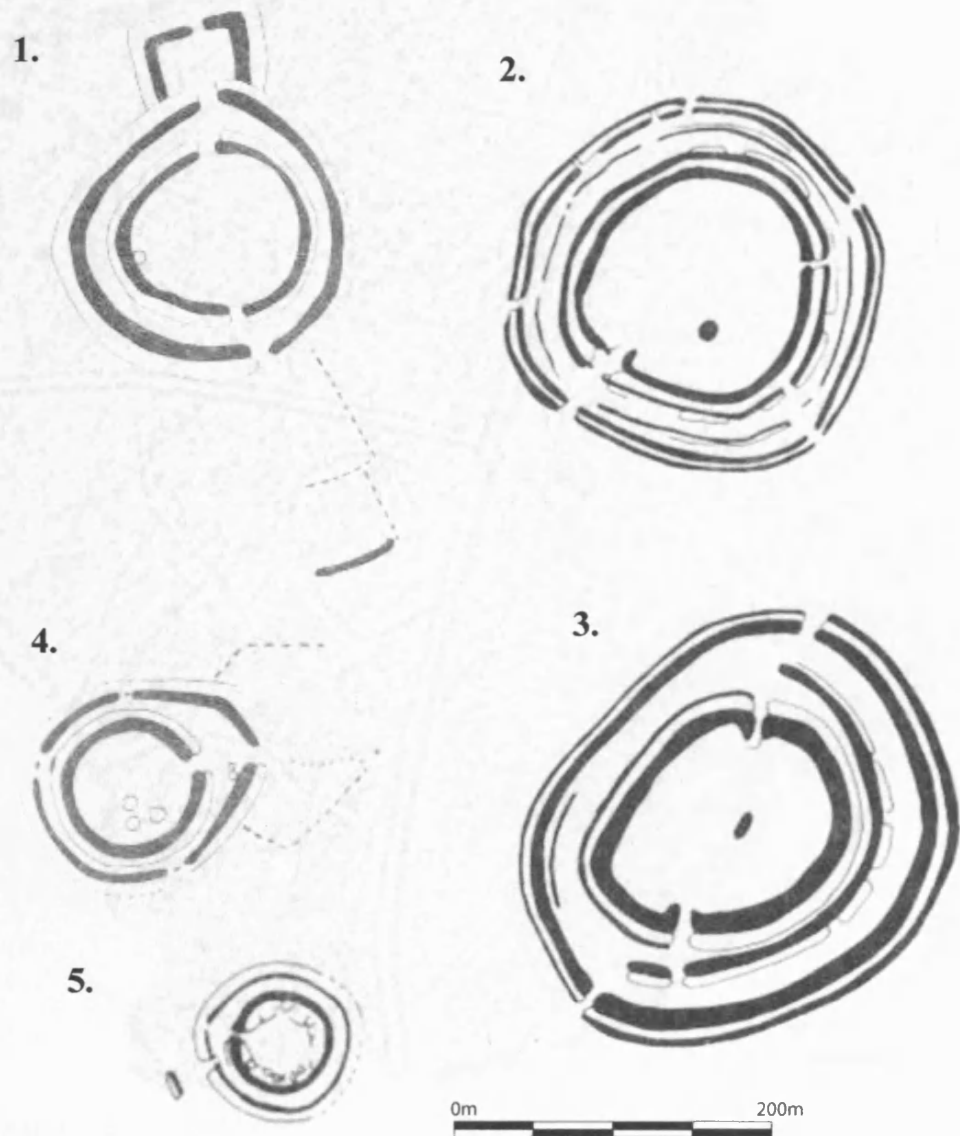


Fig. 2.6 Examples of 'developed' hillforts in Cornwall. 1. Killibury 2. Castle-an-Dinas (St. Columb) 3. Warbstow Bury 4. Castle Dore 5. Chun Castle (after Johnson and Rose 1982: 192-193).

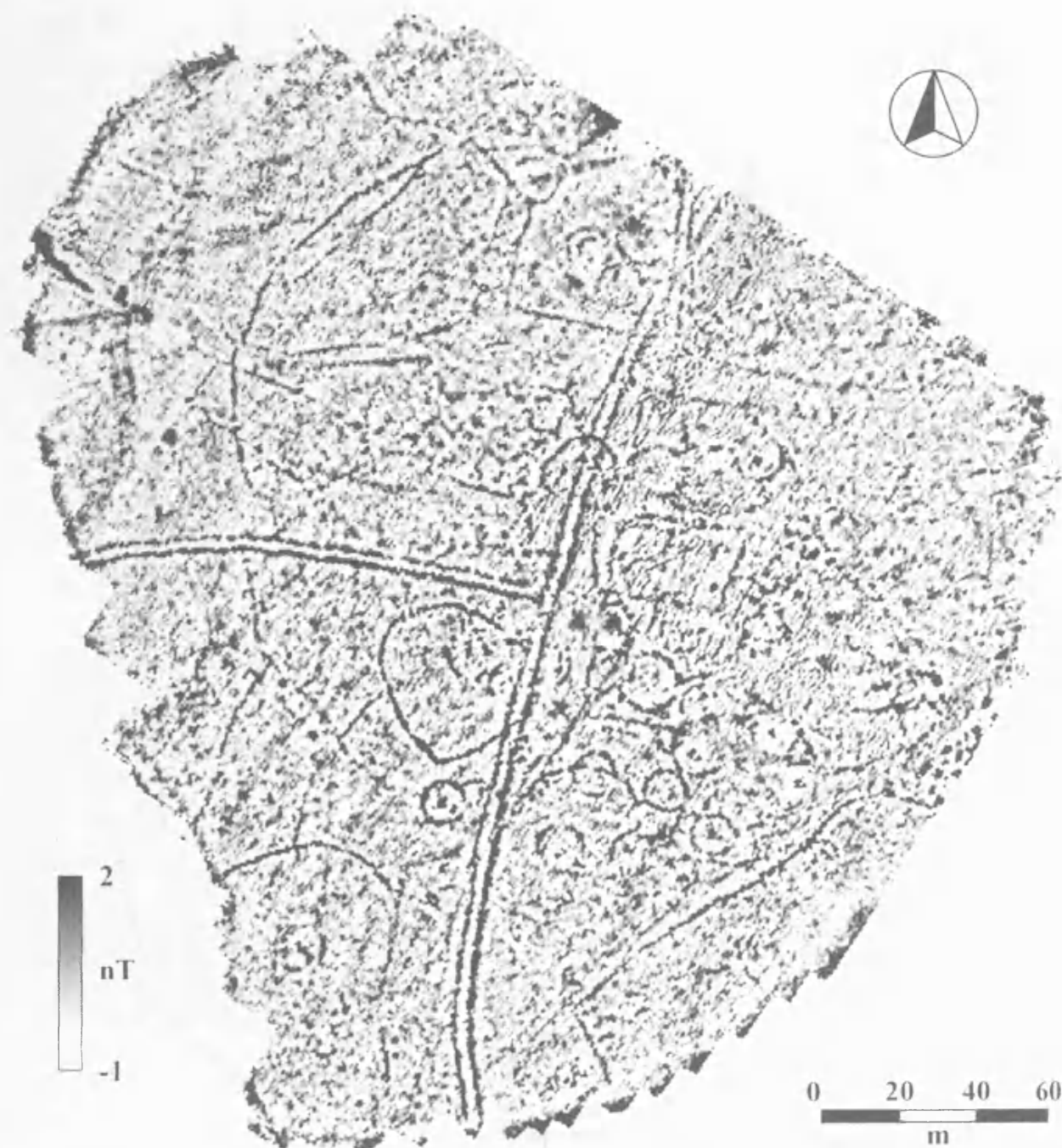


Fig. 2.7 Gradiometer survey of Gear hillfort – approximately 7ha of survey undertaken within the interior of the hillfort (after Gaffney and Gater 2003: 130 Fig. 64)

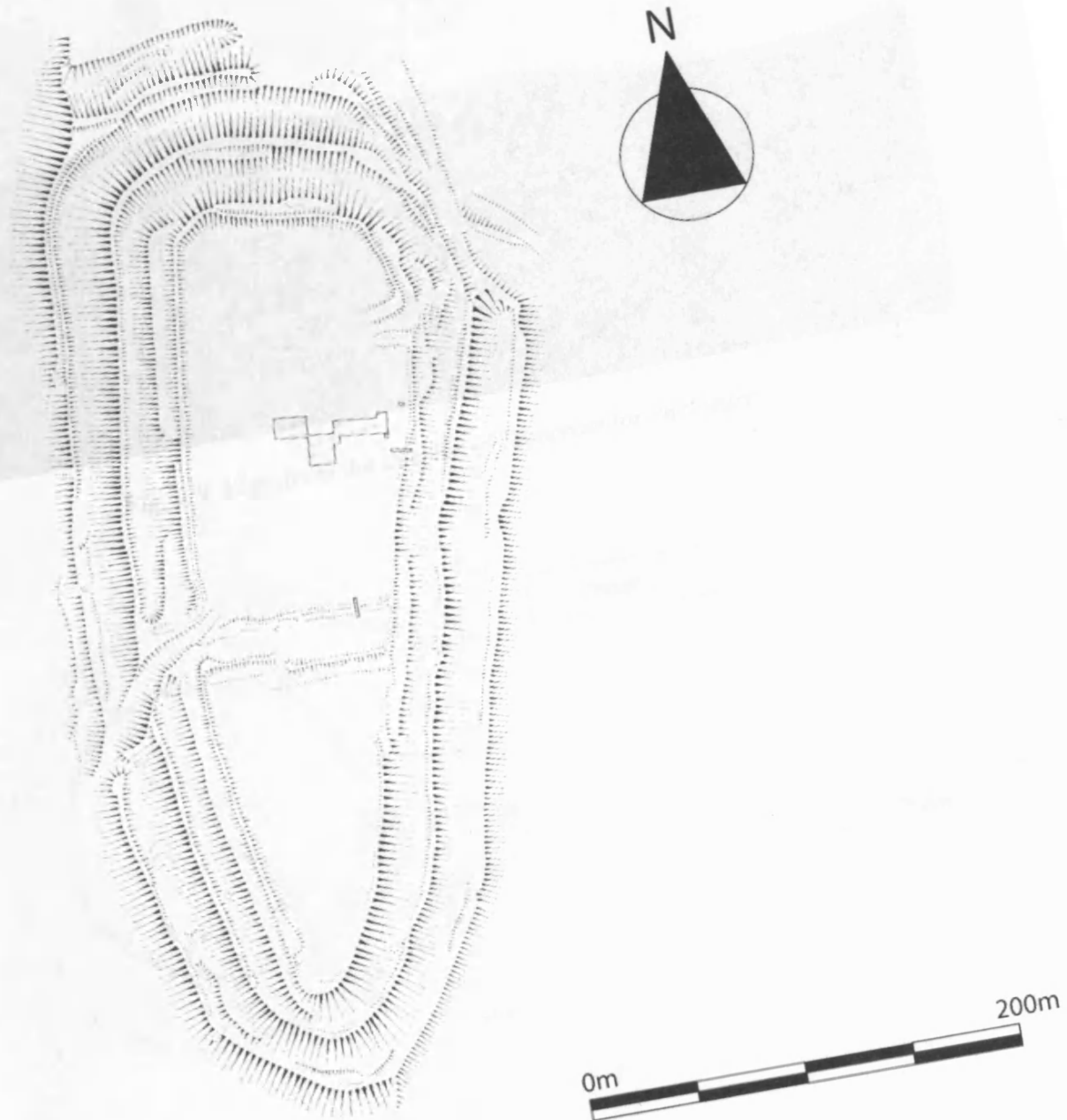


Fig. 2.8 Hembury (after Todd 1987: 158).

Fig. 2.10 Plan of interior of Castle Dore (after Quenell and Harris 1961: 121).



Fig. 2.9 View from the interior of Trencrom tor enclosure

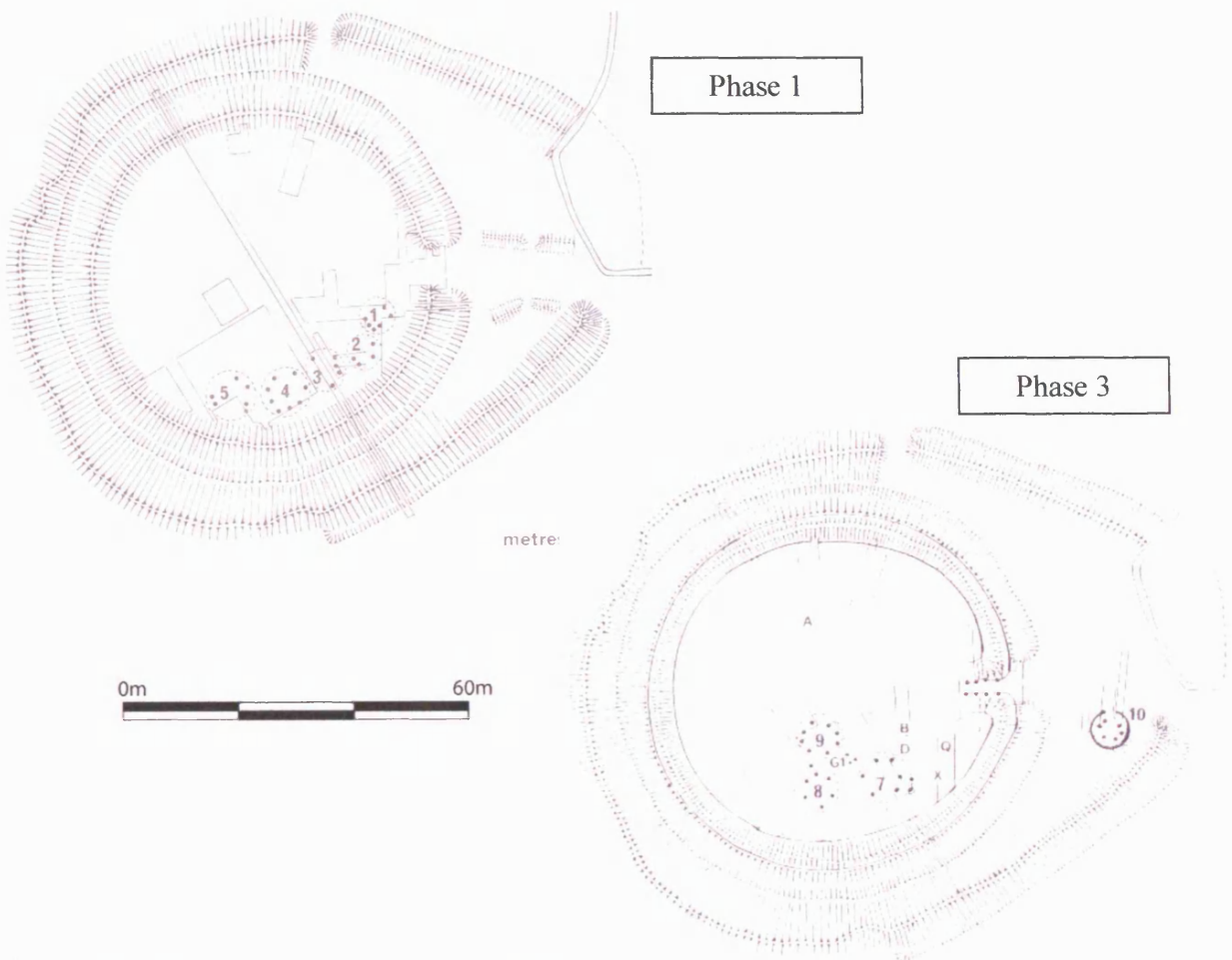


Fig. 2.10 Plan of interior of Castle Dore (after Quinnell and Harris 1985: 124).

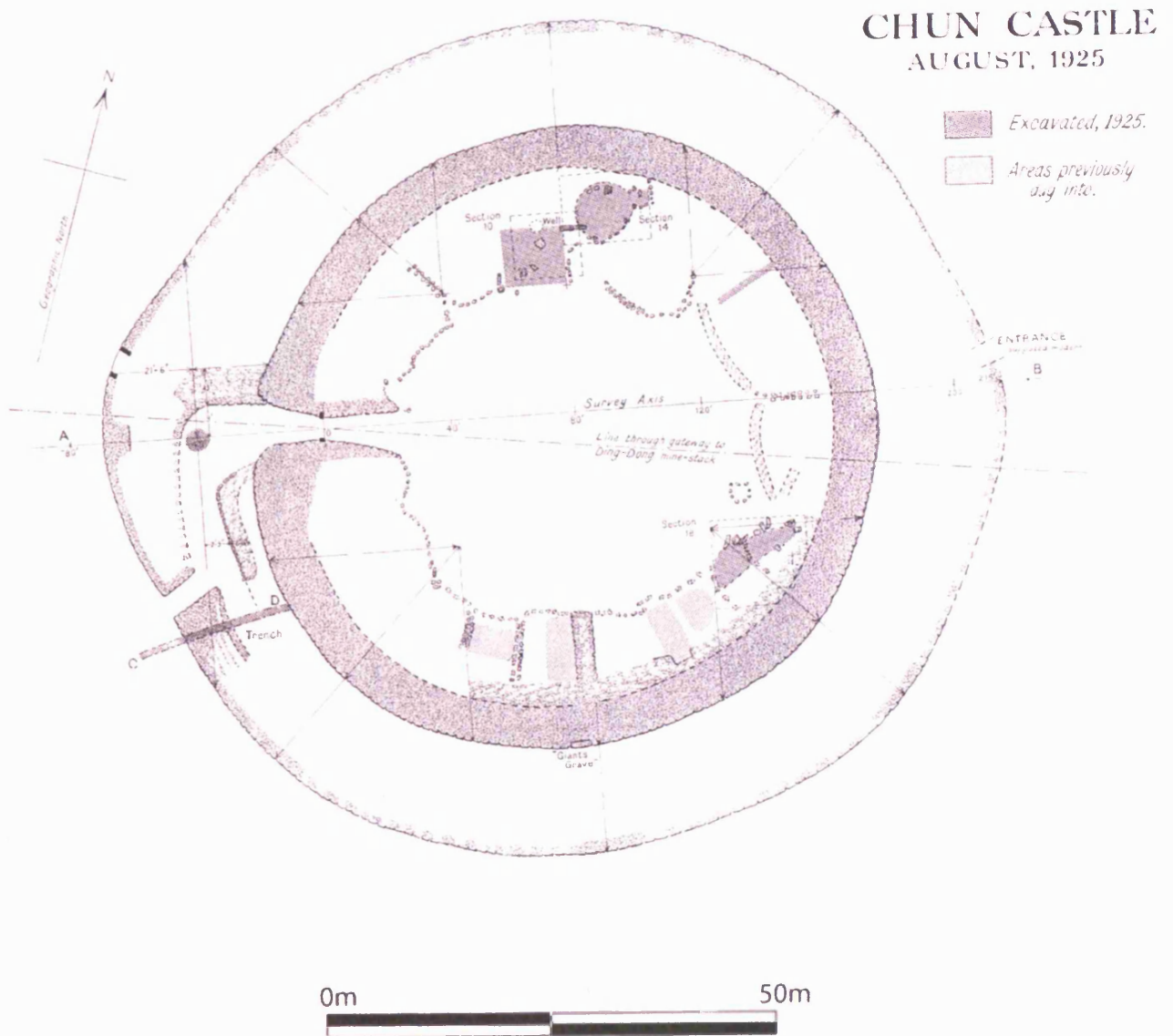


Fig. 2.11 Plan of Chun Castle (after Leeds 1926: 210).



Fig. 2.12 The extant outer wall at Chun Castle.

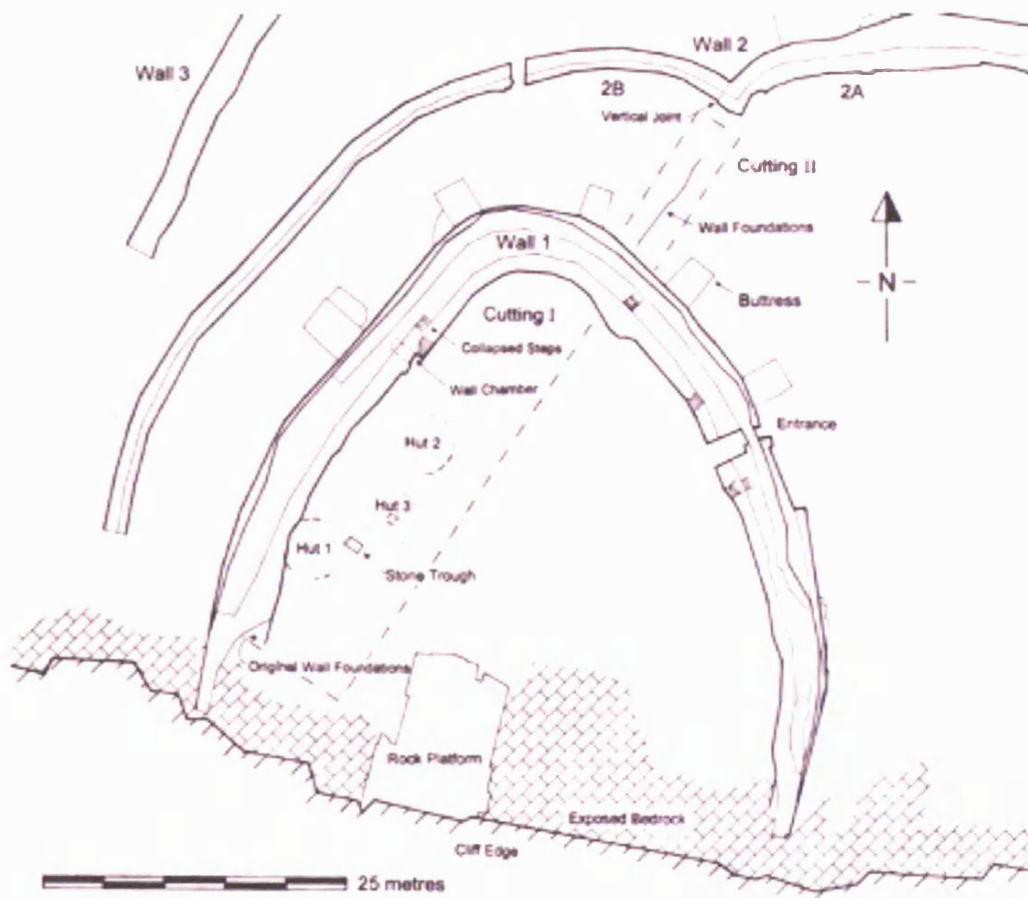


Fig. 2.13 Photo and plan of Dun Aonghasa
(http://www.heritagecouncil.ie/archaeology/unpublished_excavations/section11.html)

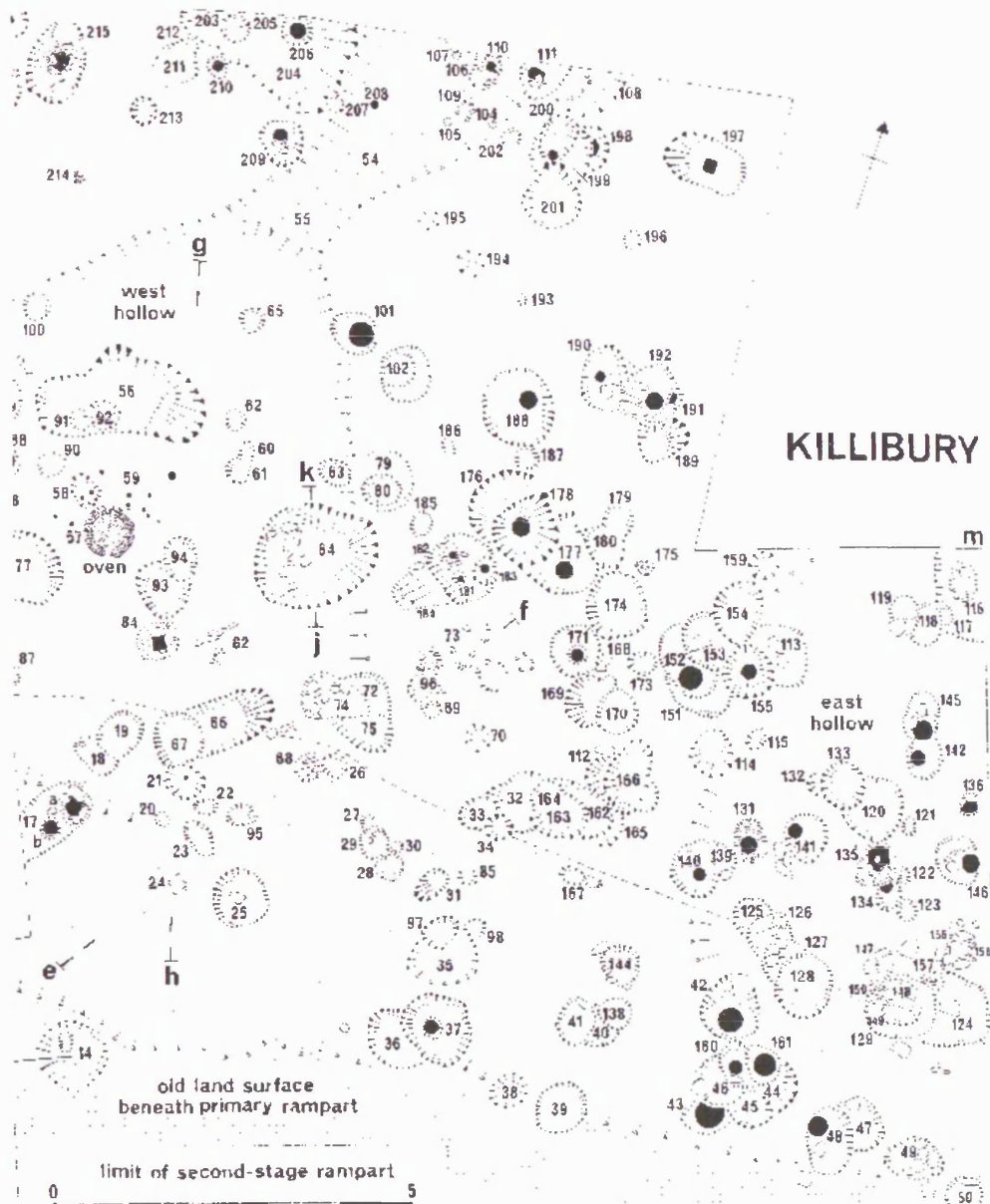


Fig. 2.14 Interior plan of Killibury (after Miles 1977: 96).

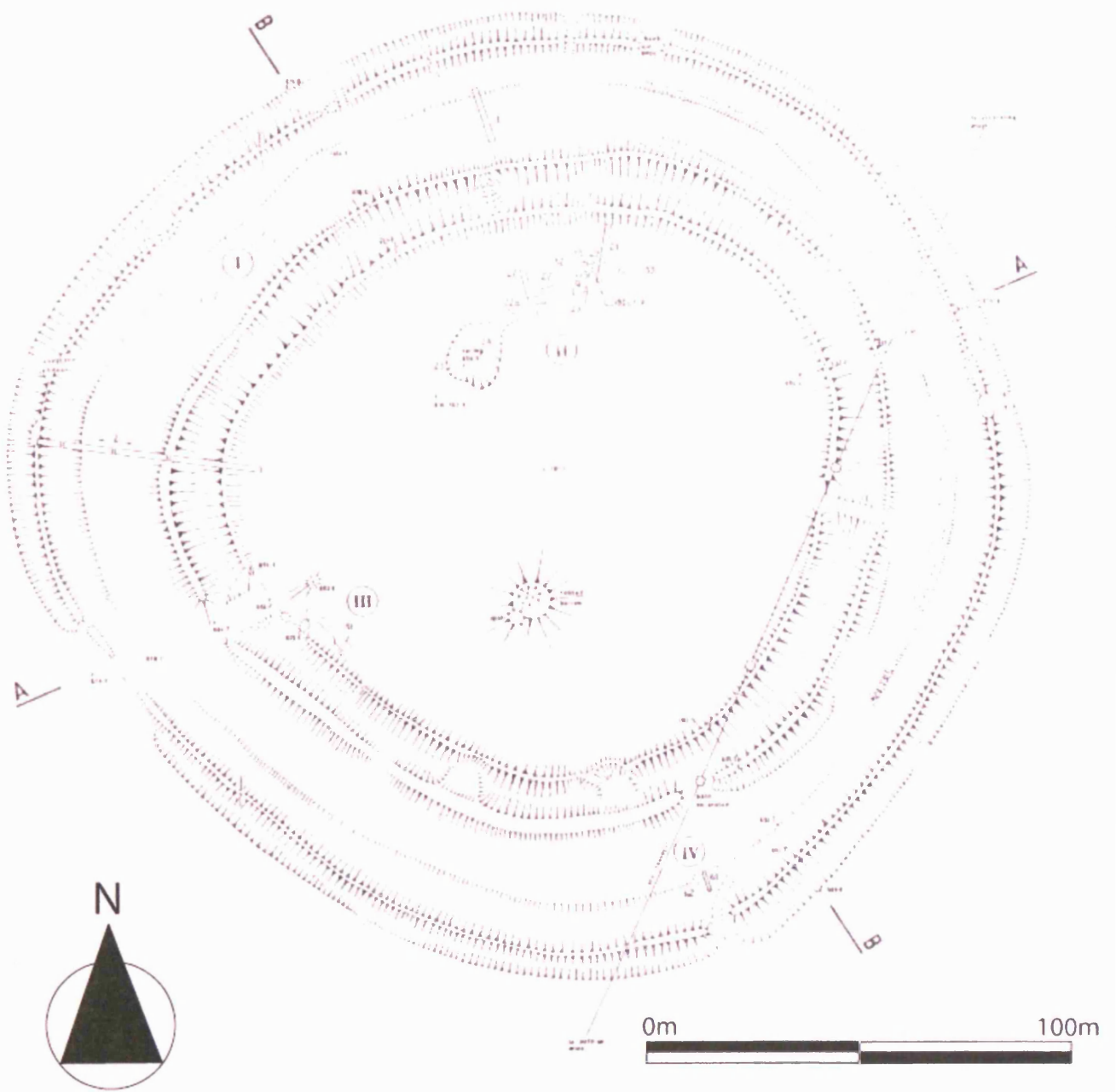


Fig. 2.15 Castle-an-Dinas, St. Columb (after Wailes 1963: 53).

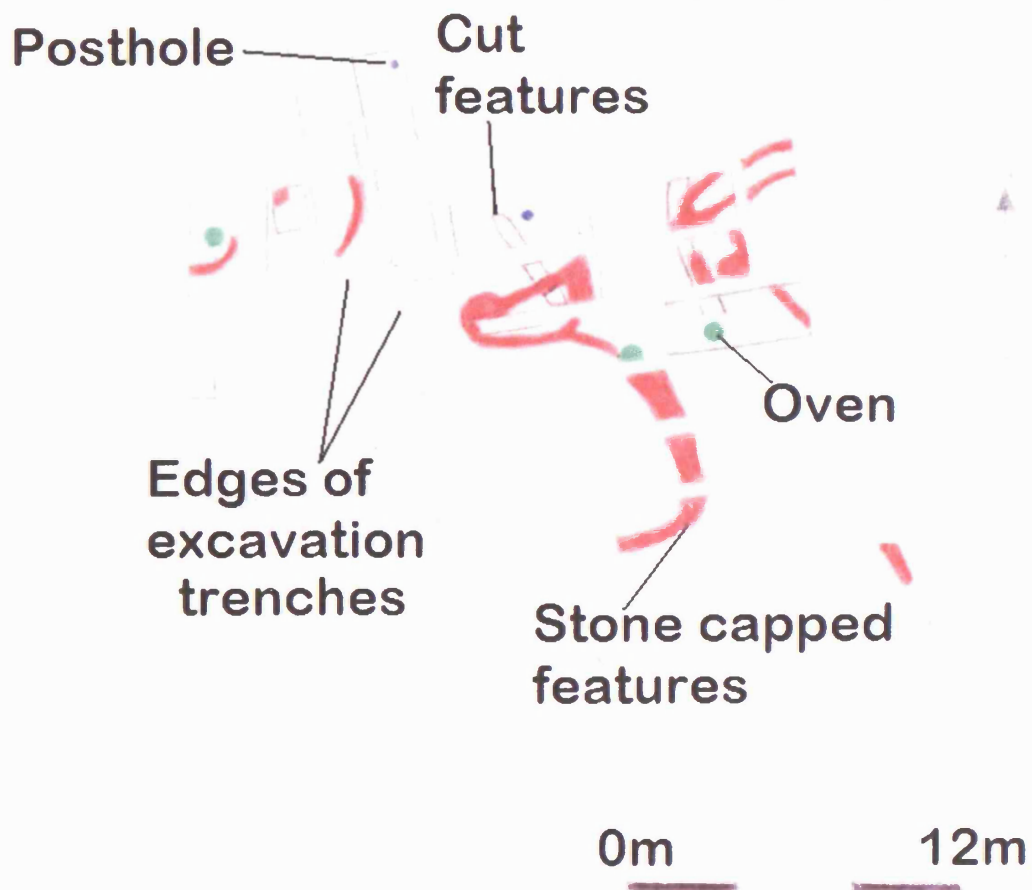
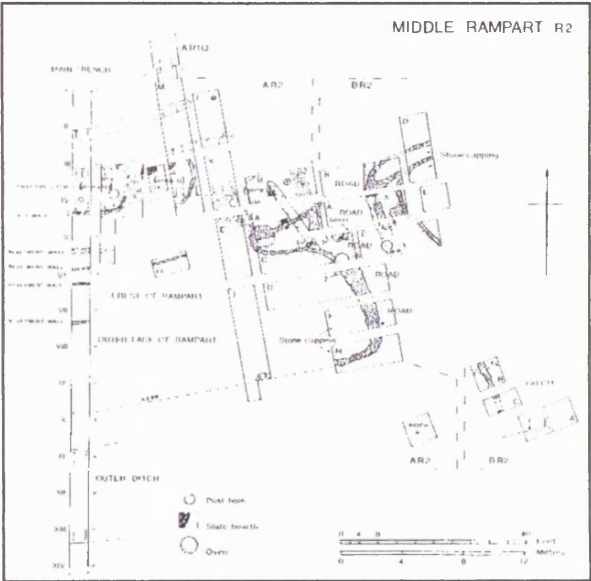


Fig. 2.16 Simplified drawing of activity between the ramparts at The Rumps (redrawn from Brooks 1974: 8, top right).

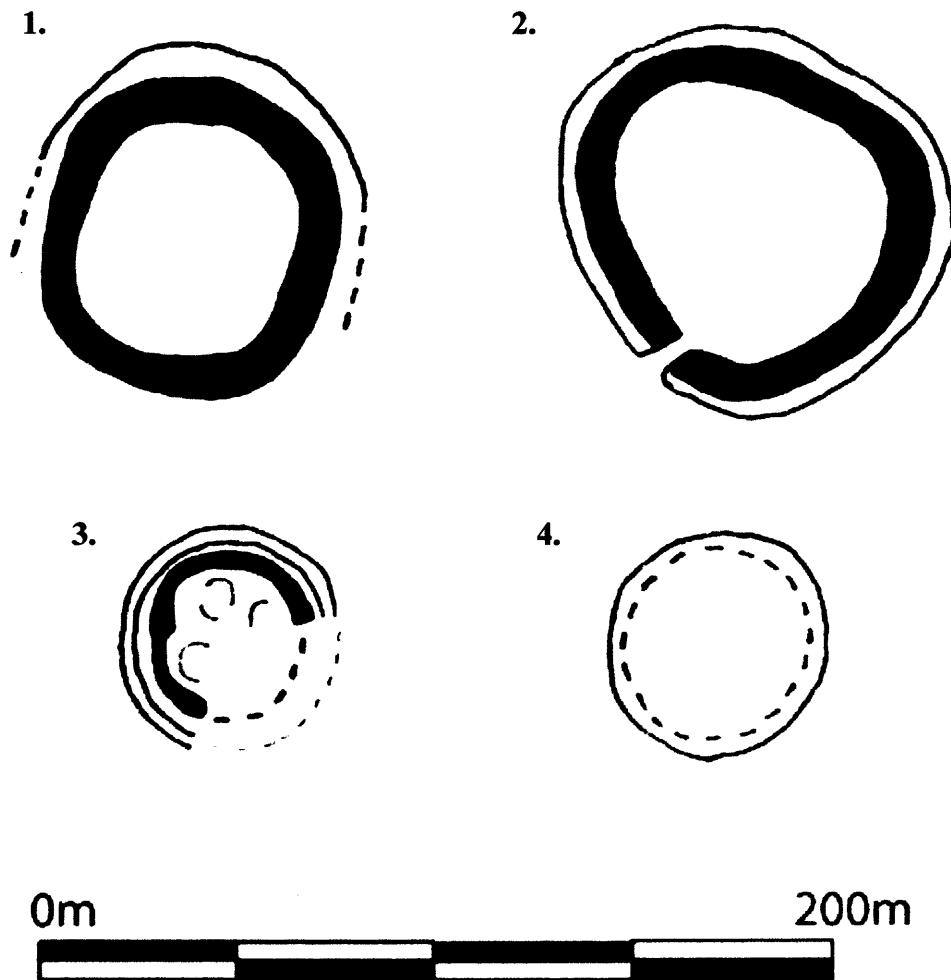


Fig. 2.17 Examples of 'rounds' in Cornwall: 1. Penhale, 2. Carlidnack, 3. Threemilestone, 4. Bodwen (redrawn from Johnson and Rose 1982: fig. 3).

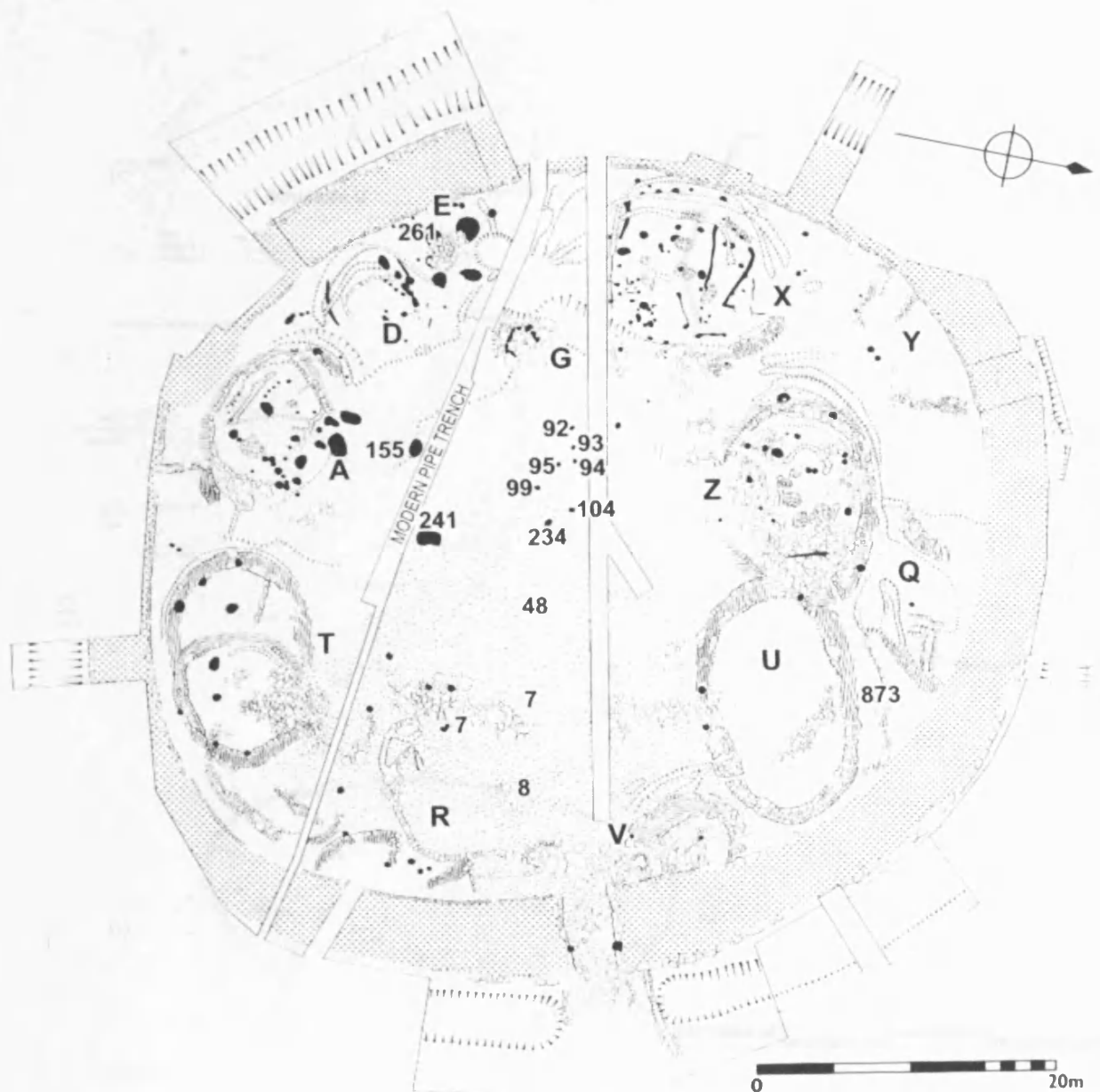


Fig. 2.18 Plan of features associated with Period 5 at Trethurgy (c. 150 AD) (after Quinnell 2004: 7).

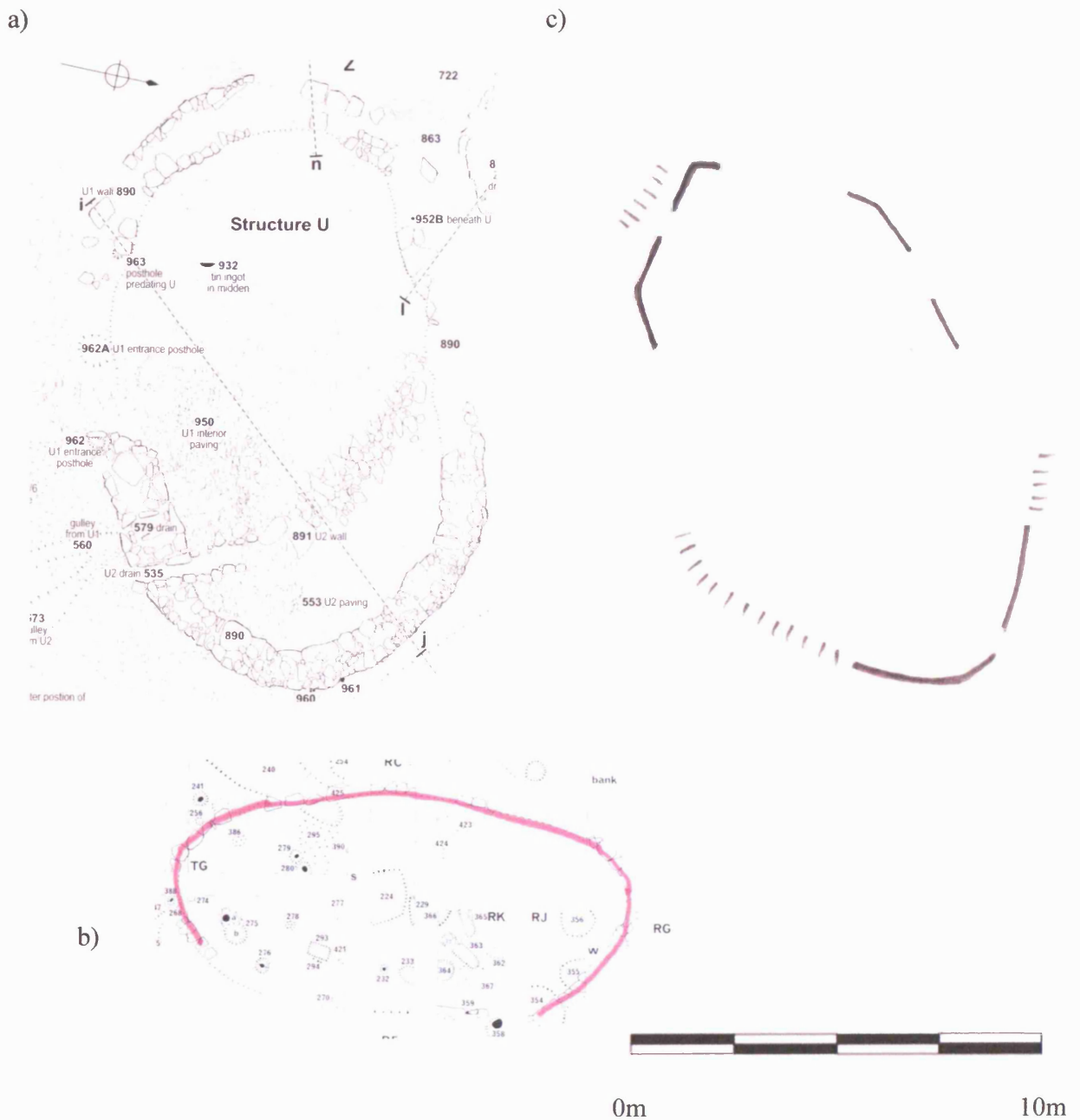


Fig. 2.19 Oval structures of Roman date from a) Trethurgy (after Quinnell 2004: 26) and b) Castle Gotha (Saunders and Harris 1982: Fig. 7) and boat-shaped structures from c) Grambla (redrawn from Saunders 1972: 52).

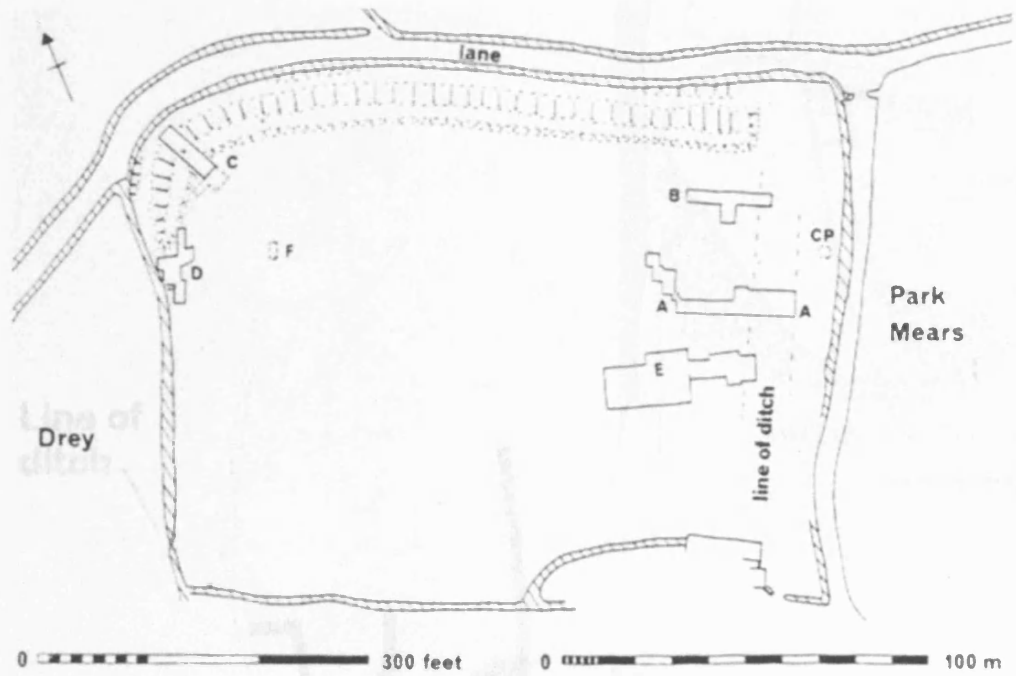


Fig. 2.20 Plan of Carvossa, Probus (after Carlyon 1987: 104).

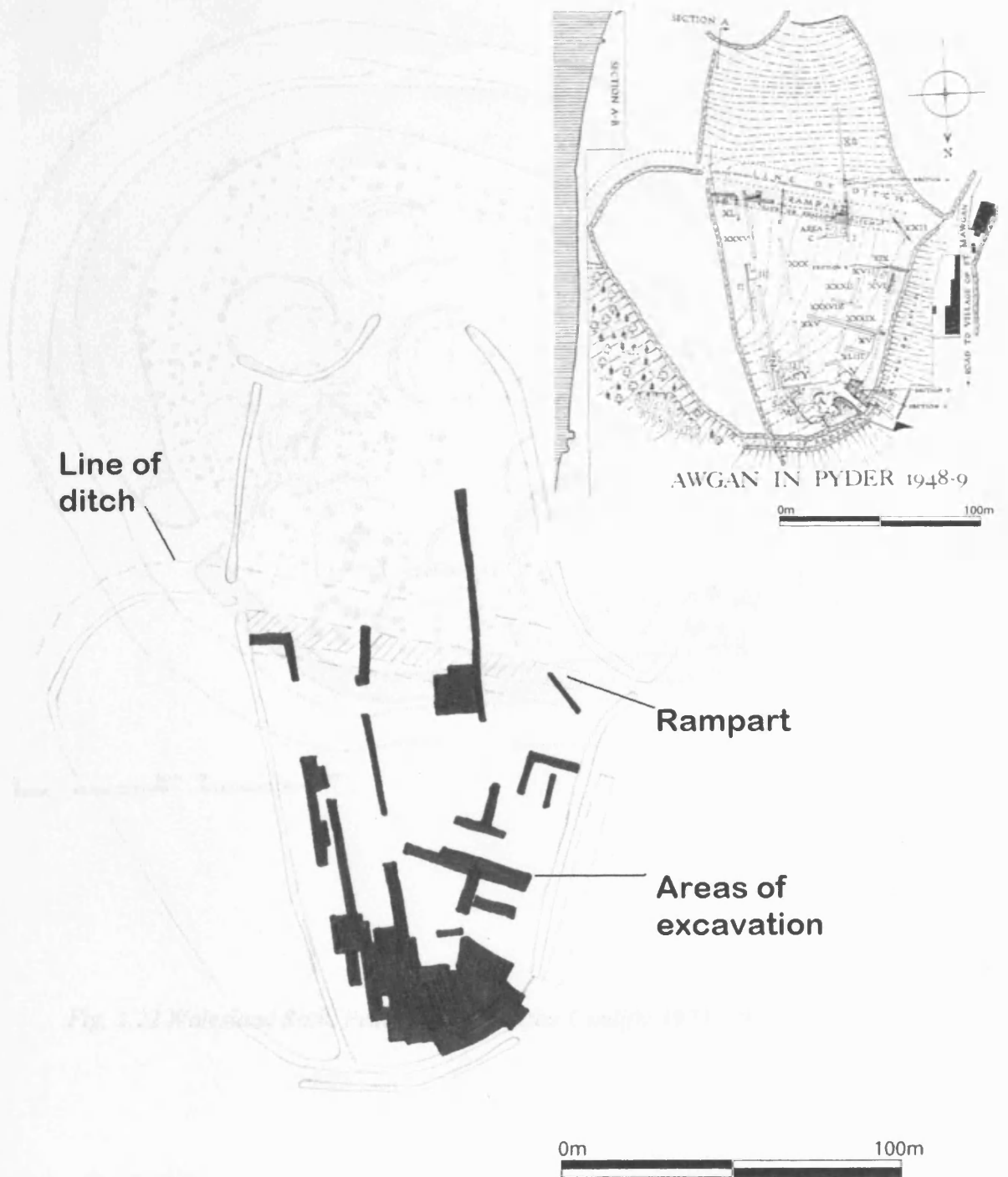


Fig. 2.21 St Mawgan-in-Pyder (redrawn from Threipland 1956: 34).



Fig. 2.22 Walesland Rath, Pembrokeshire (after Cunliffe 1975: 193).

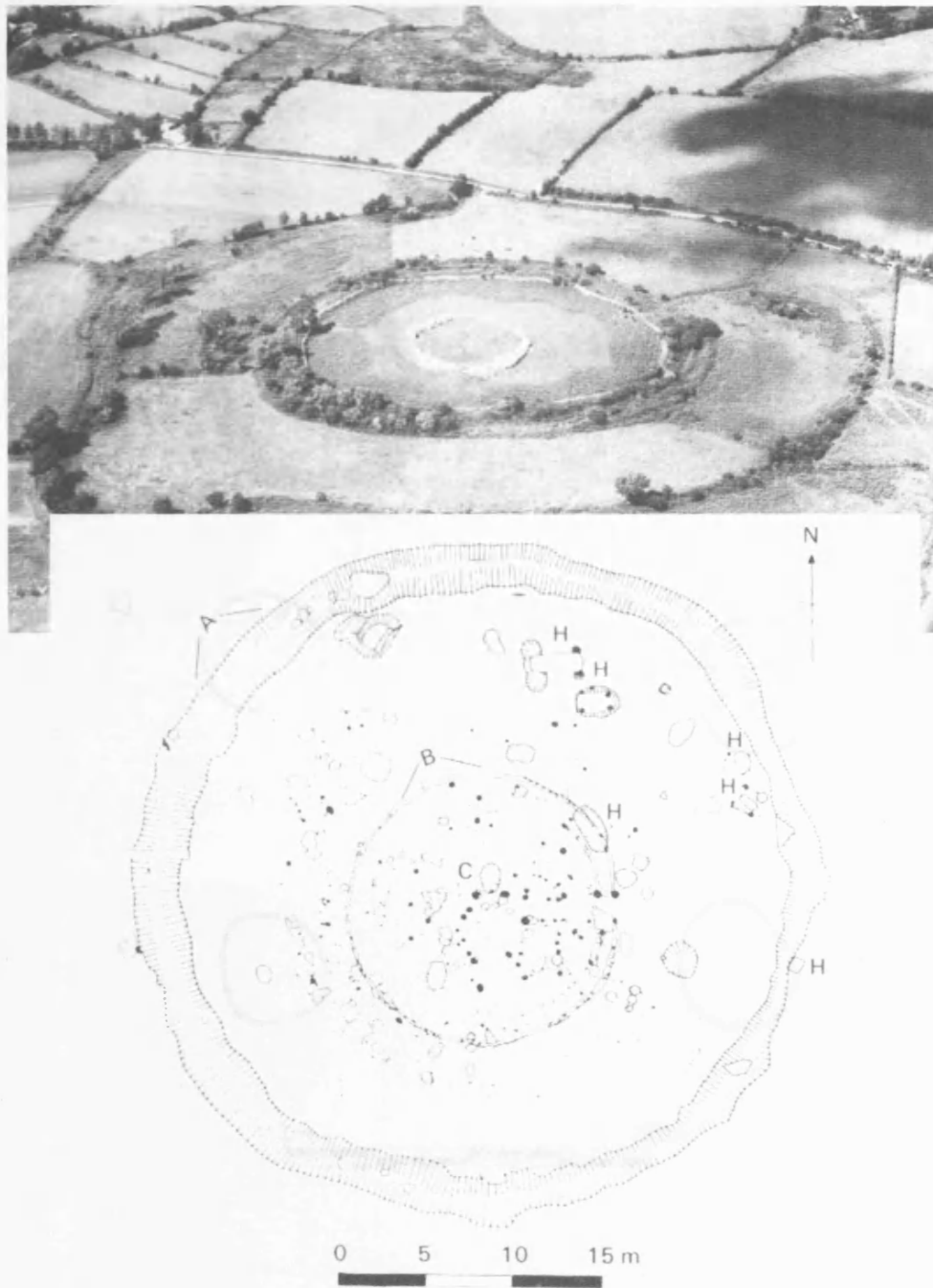


Fig. 2.23 Rathgall ringfort, C. Wicklow (after O'Kelly 1989: 315).

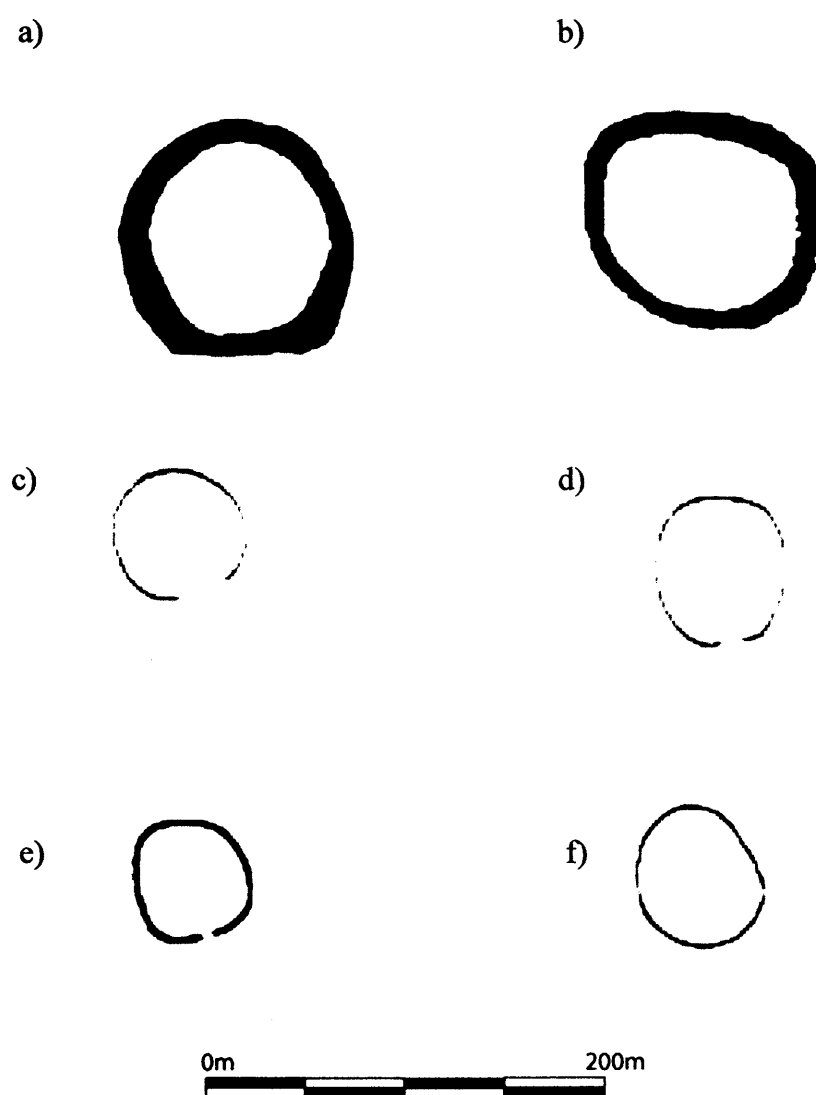


Fig. 2.24 Small univallate enclosures from Brittany: a) Bas Bodiné b) Zinsec c) Kerihuel d) Forêde Curnoë I e) Esnauderie f) Petit Olivet (after Bastide 2000: 177).

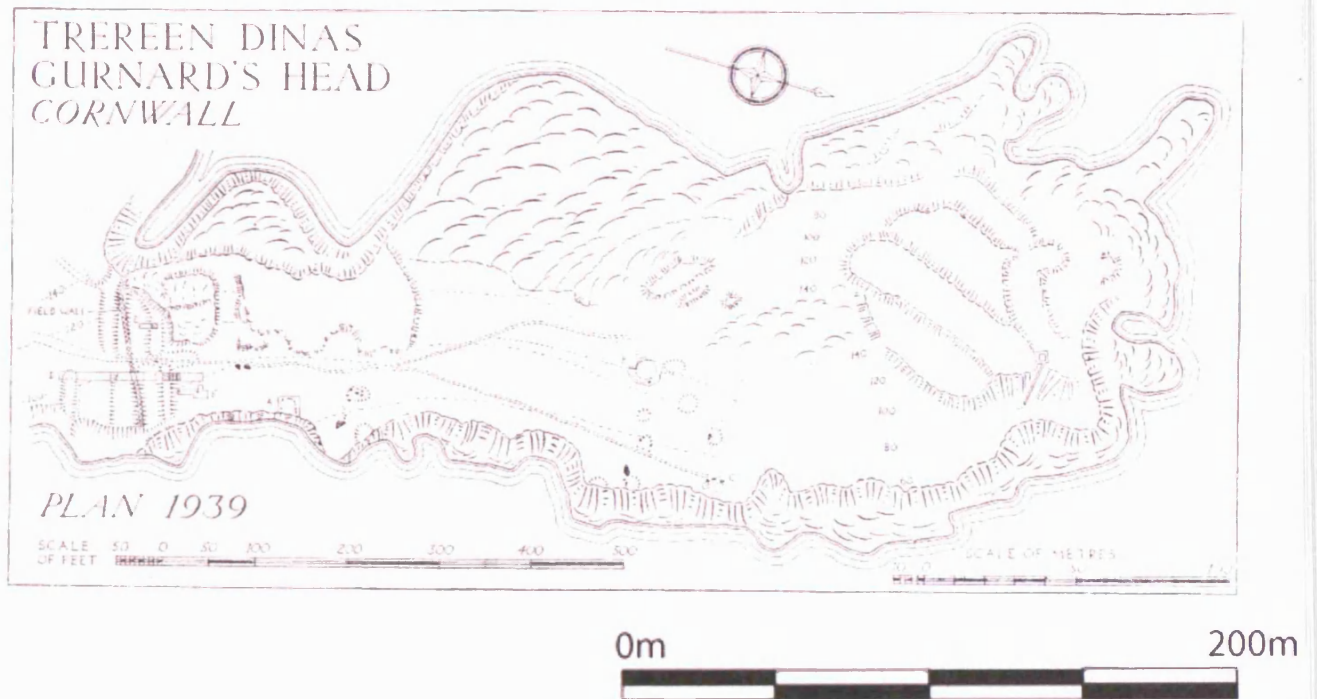


Fig. 2.25 Plan of Gurnards Head (after Gordon 1940: 98).



Fig. 2.26 View seaward at Gurnards Head

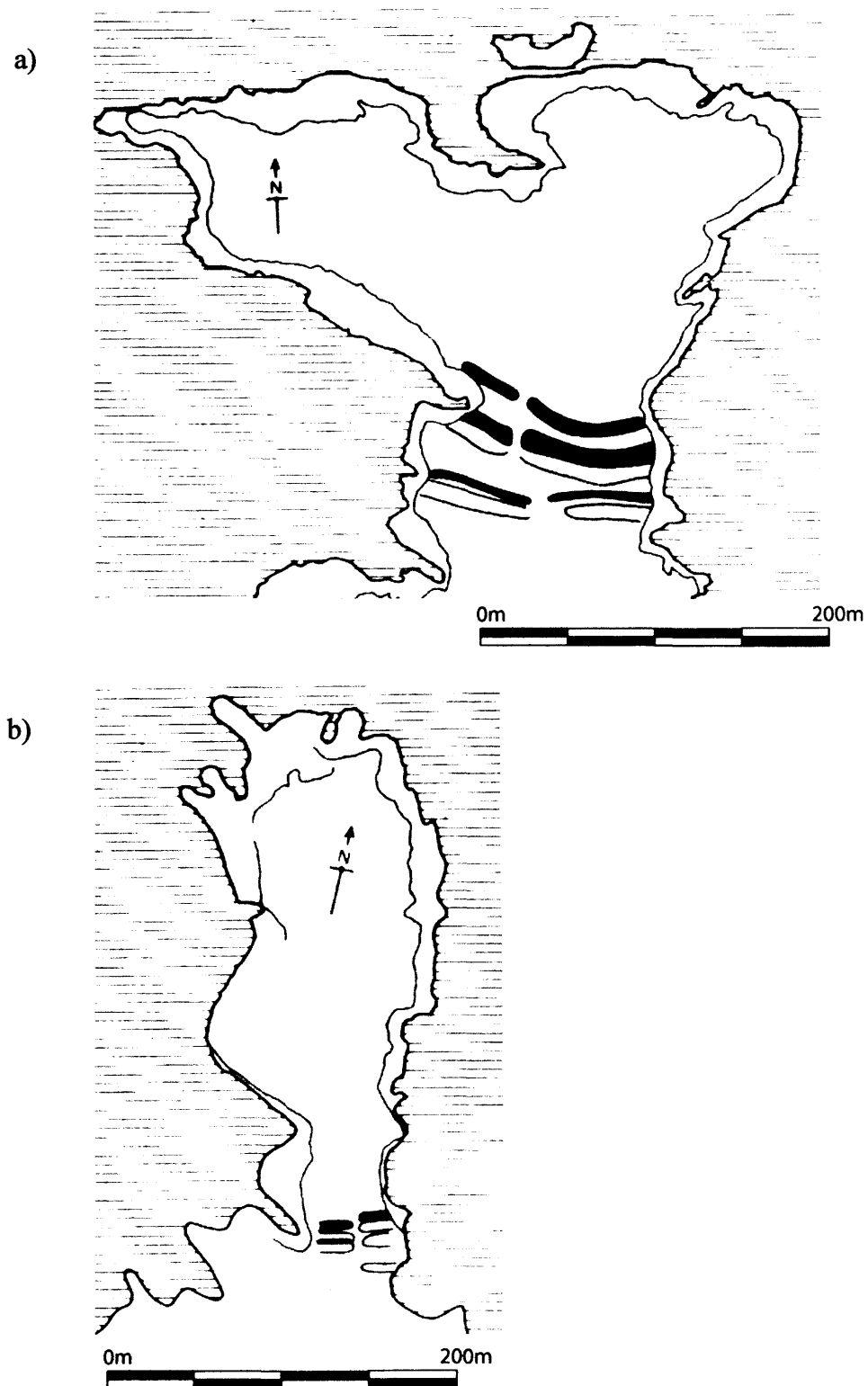


Fig. 2.27 Examples of cliff castles in Cornwall: a) *The Rumps* and b) *Gurnards Head* (after Cunliffe 1974: 192).

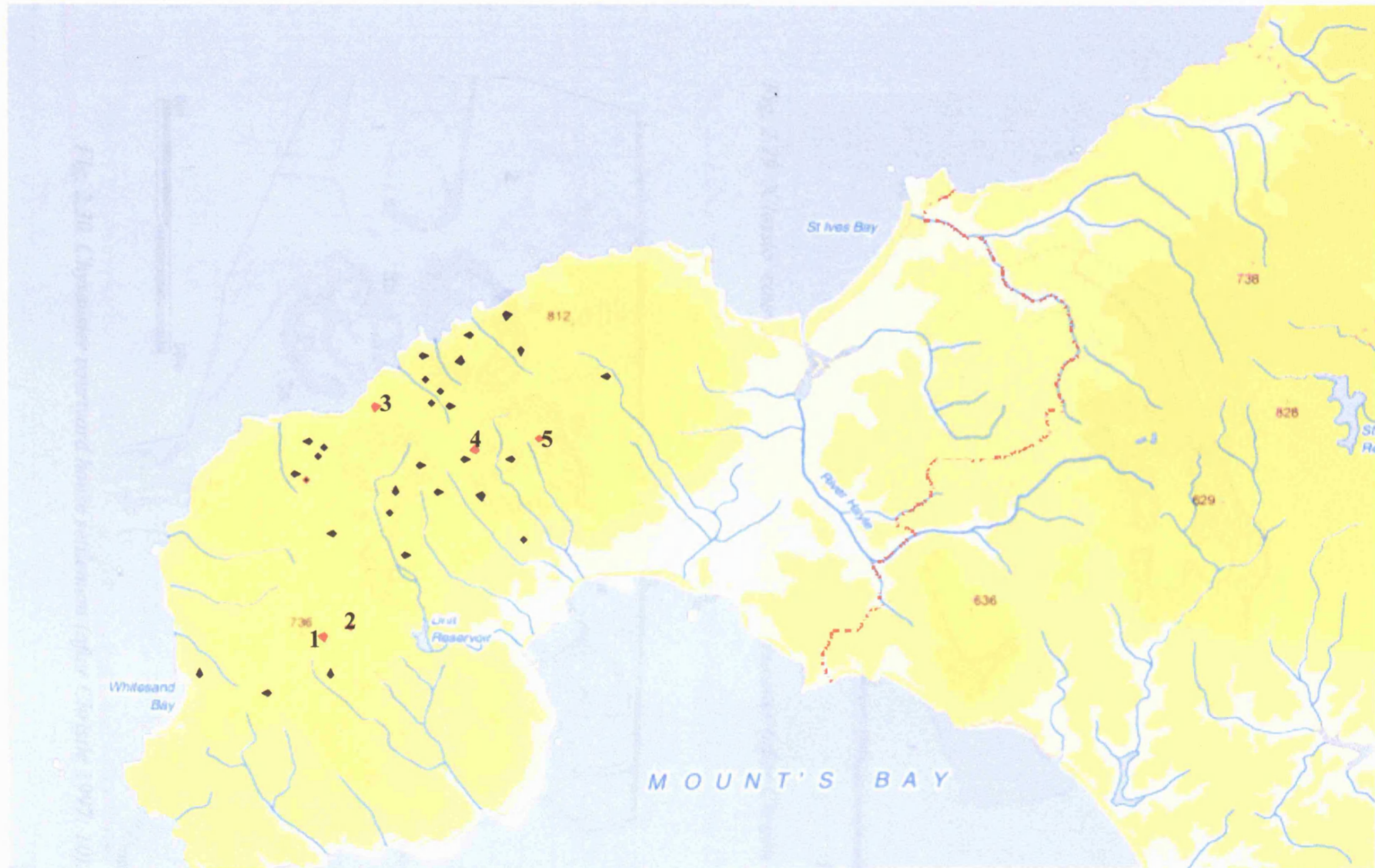


Fig. 2.28 Distribution of courtyard house settlements in West Penwith (numbered sites have been excavated: 1. Carn Euny 2. Goldherring 3. Porthmeor 4. Mulfra Vean 5. Chysauster).

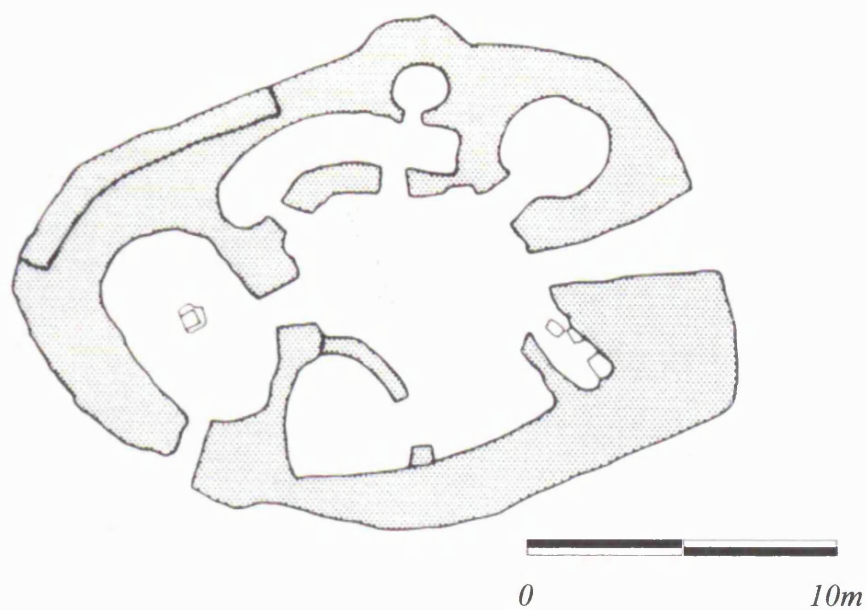


Fig. 2.29 'Classic' courtyard house design: CH1(i) at Chysauster (after Christie 1997: 18).

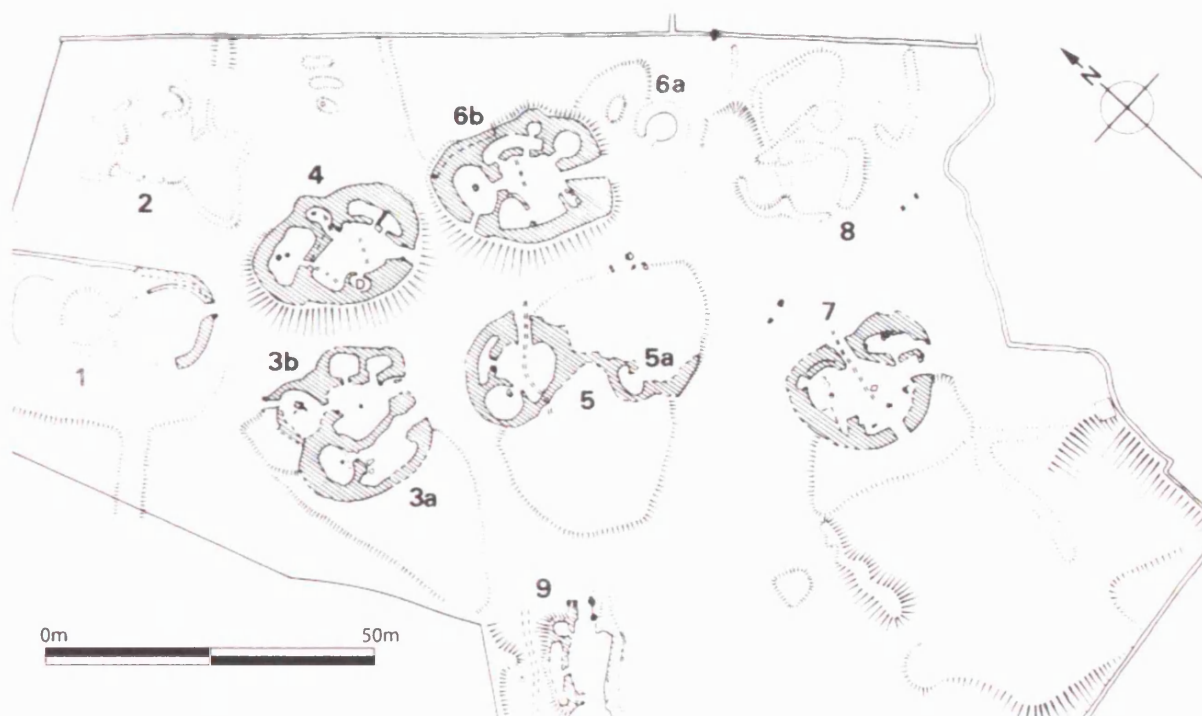


Fig. 2.30 Chysauster courtyard house settlement (after Christie 1997: 10).



Fig. 2.31 English Heritage reconstruction of a courtyard house (after Christie 1997: 3).

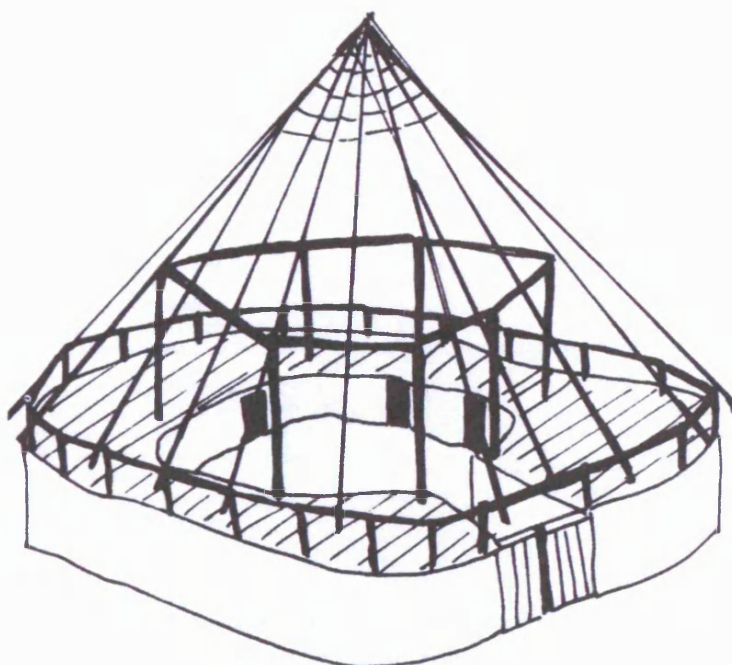


Fig. 2.32 Reconstruction of a courtyard house under a single roof (after Wood 1997: 104).



Fig. 2.33 Reconstruction of the figure-of-eight house at Great Berna after www.hollyburn.co.uk/location.htm).

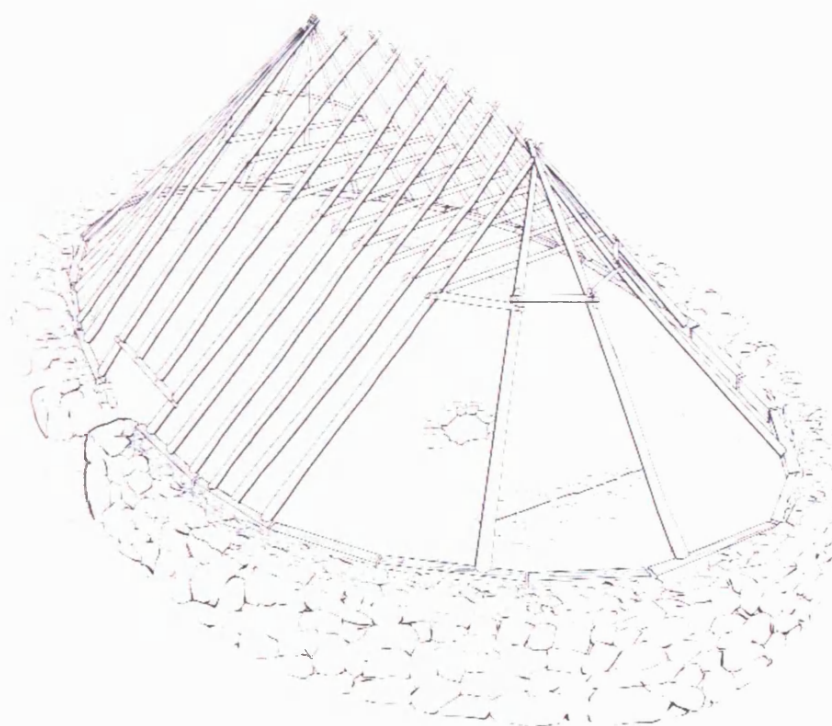


Fig. 2.34 Conjectural reconstruction of House Z2 at Trethurgy Round (after Quinnell 2004: 195, Fig. 90).

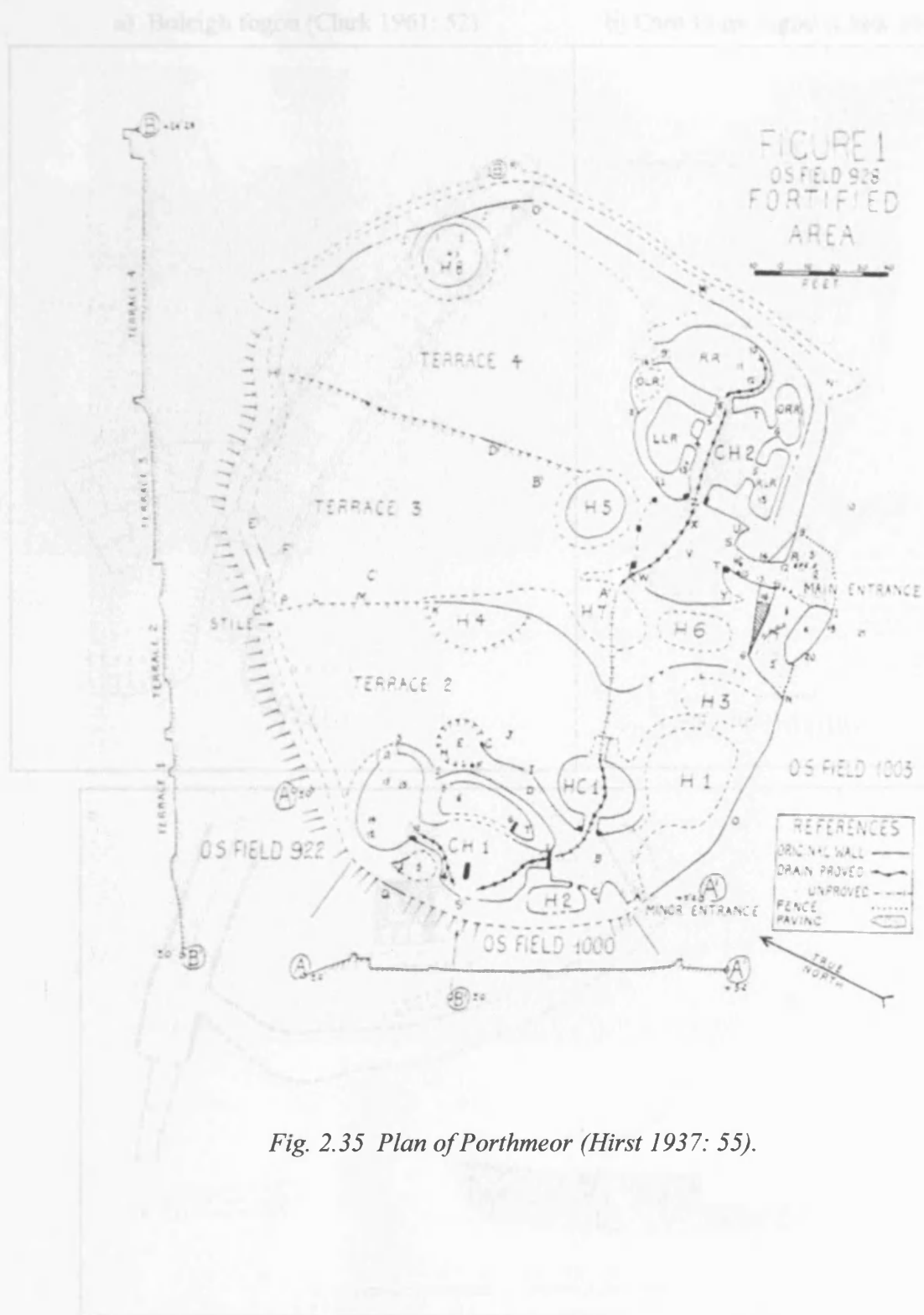
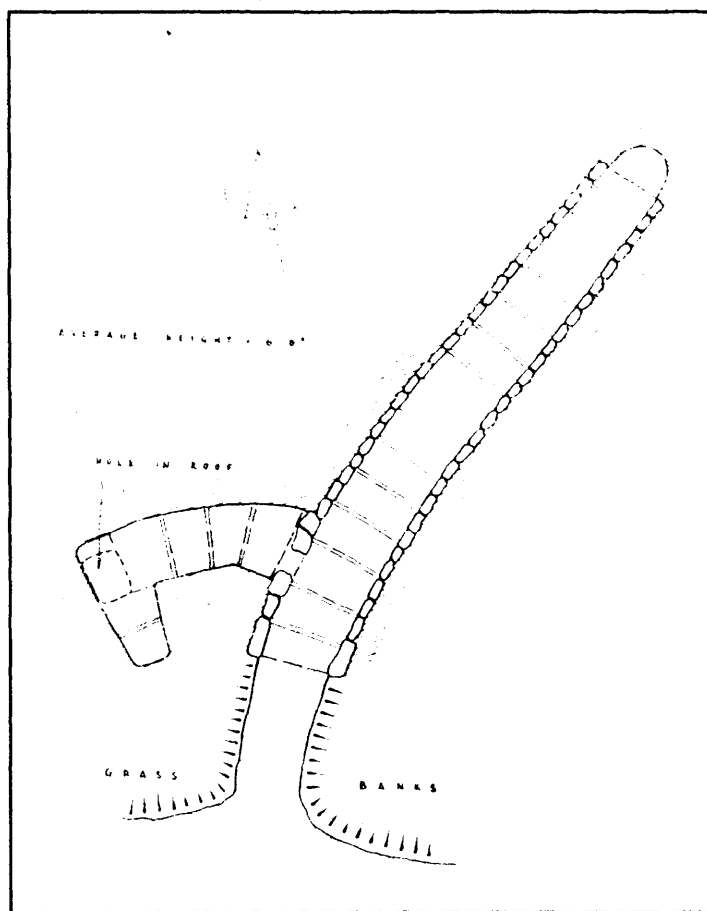
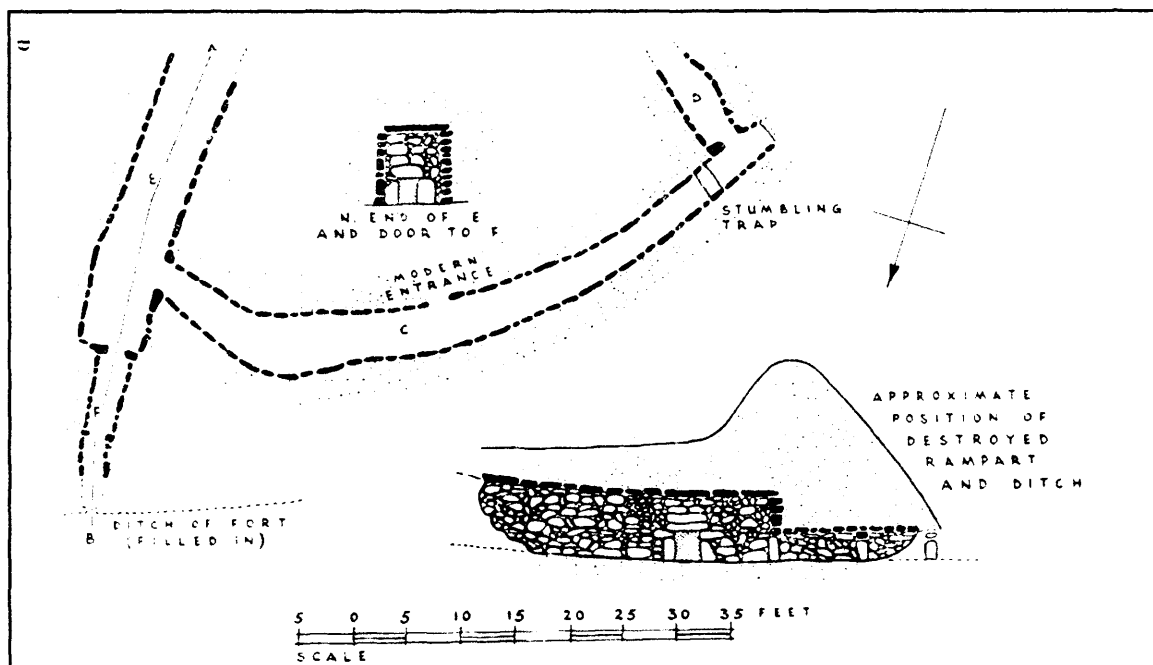
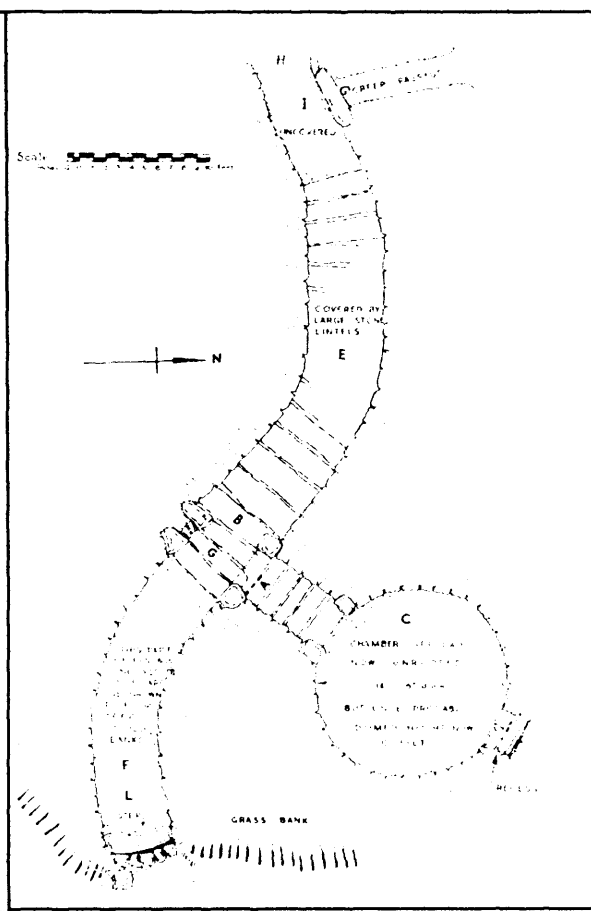


Fig. 2.35 Plan of Porthmeor (Hirst 1937: 55).

a) Boleigh fogou (Clark 1961: 52)



b) Carn Euny fogou (Clark 1961: 35)



c) Halligey fogou (Clark 1961: 29)

Fig. 2.36 Examples of Cornish fogous (not to scale).



Fig. 2.37 Potential 'above-ground fogou' at Bosporthennis

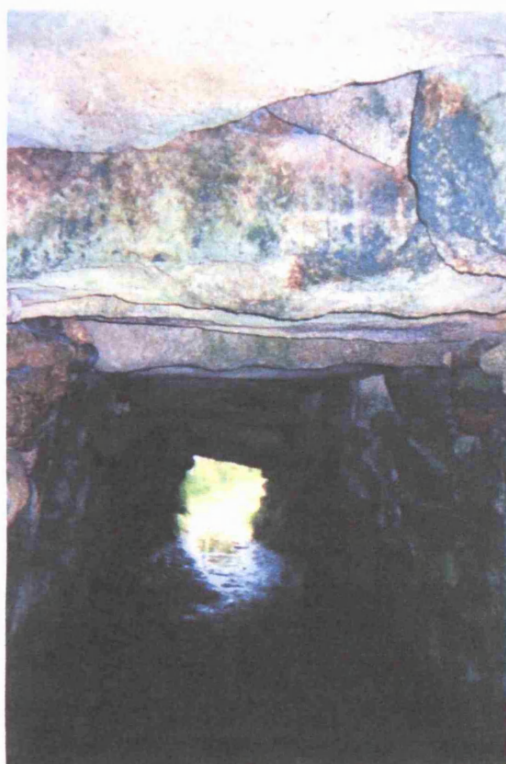


Fig. 2.38 View along the long passage of the fogou at Carn Euny

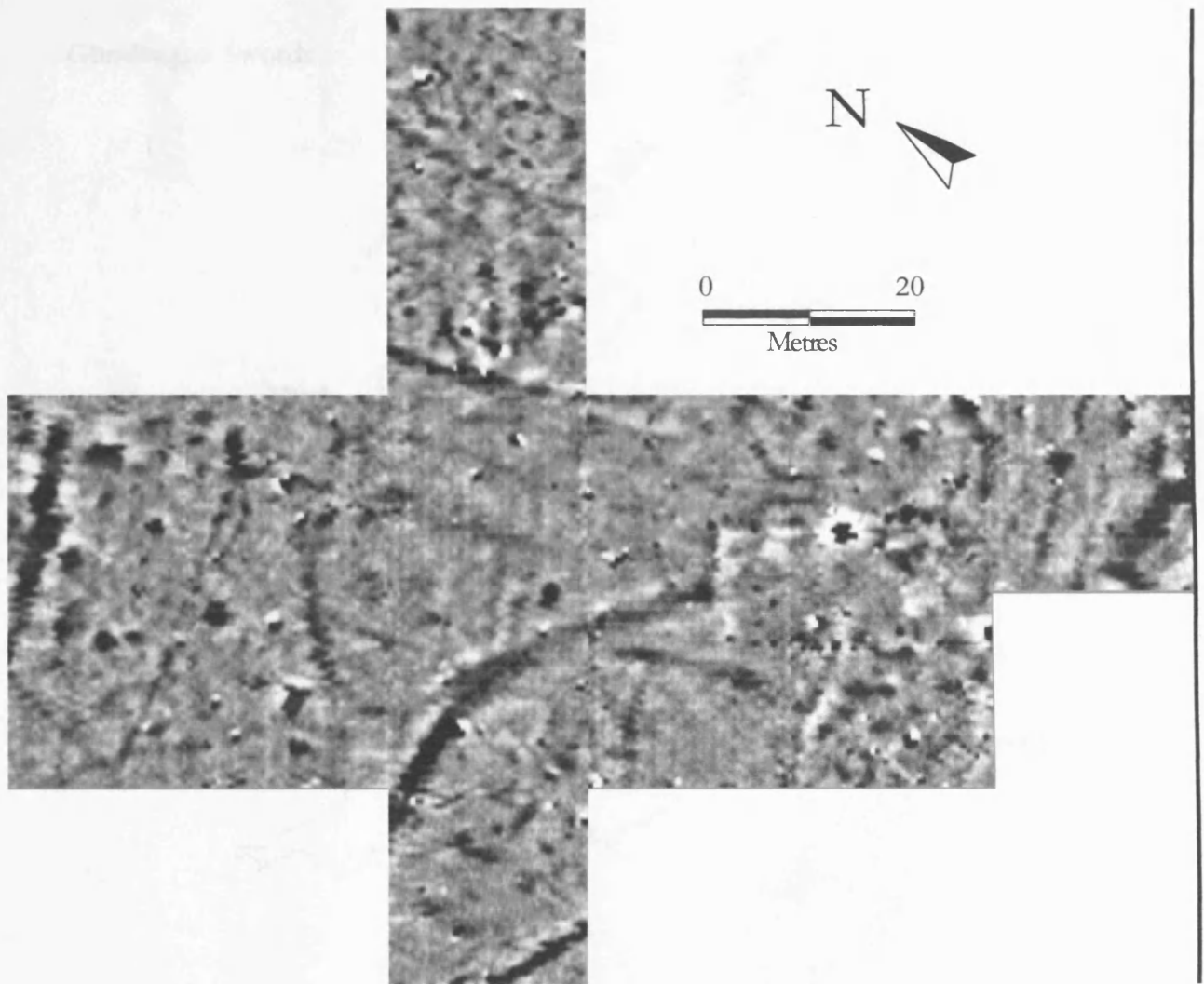


Fig. 2.39 Palimpsest features within the interior of Carvossa

Gündlingen Swords



Fig. 2.40 Map of Gündlingen type swords (after Cunliffe 2001: 321).

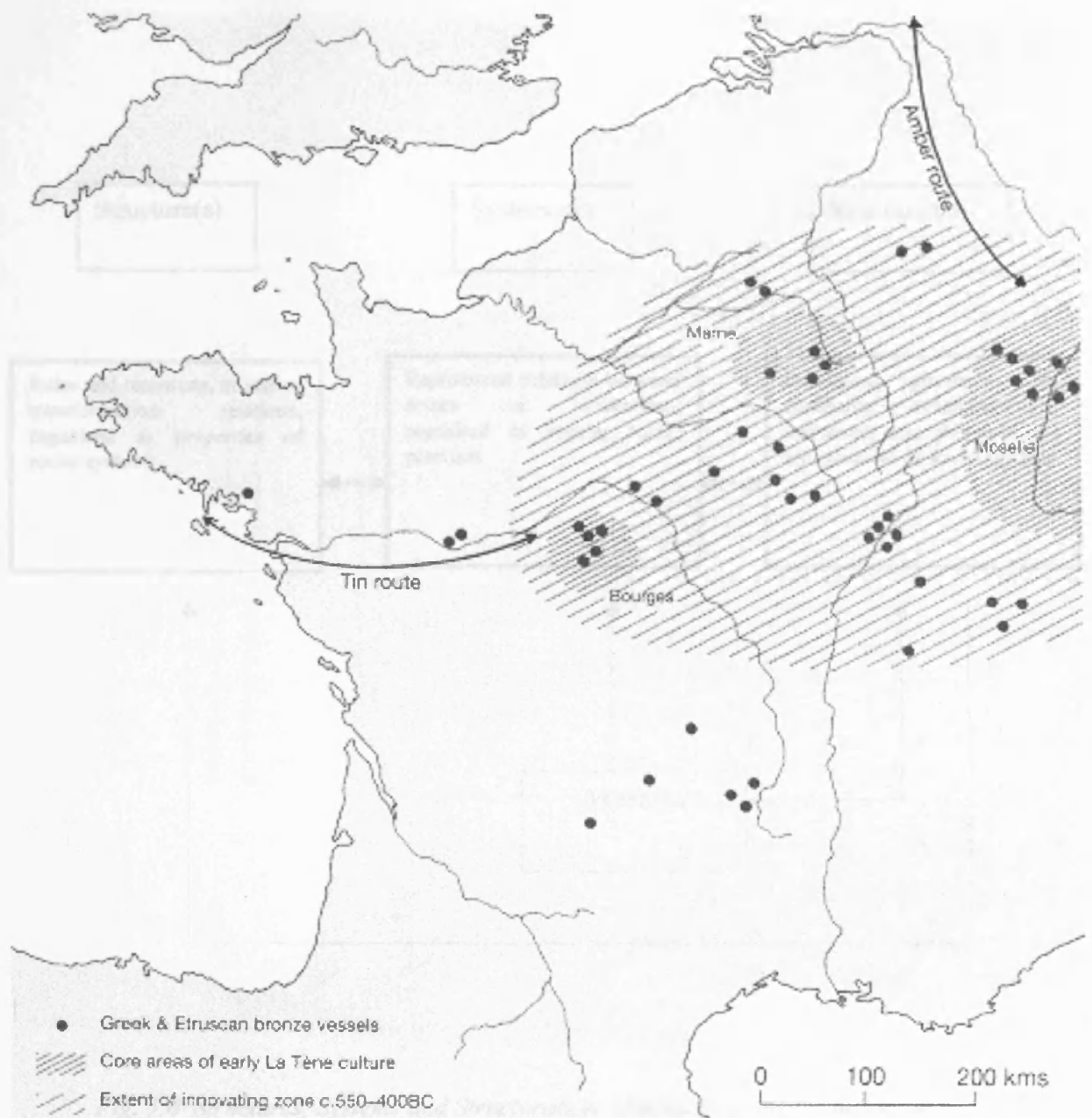


Fig. 2.41 Trade routes in the early La Tène period (after Cunliffe 2001: 322).

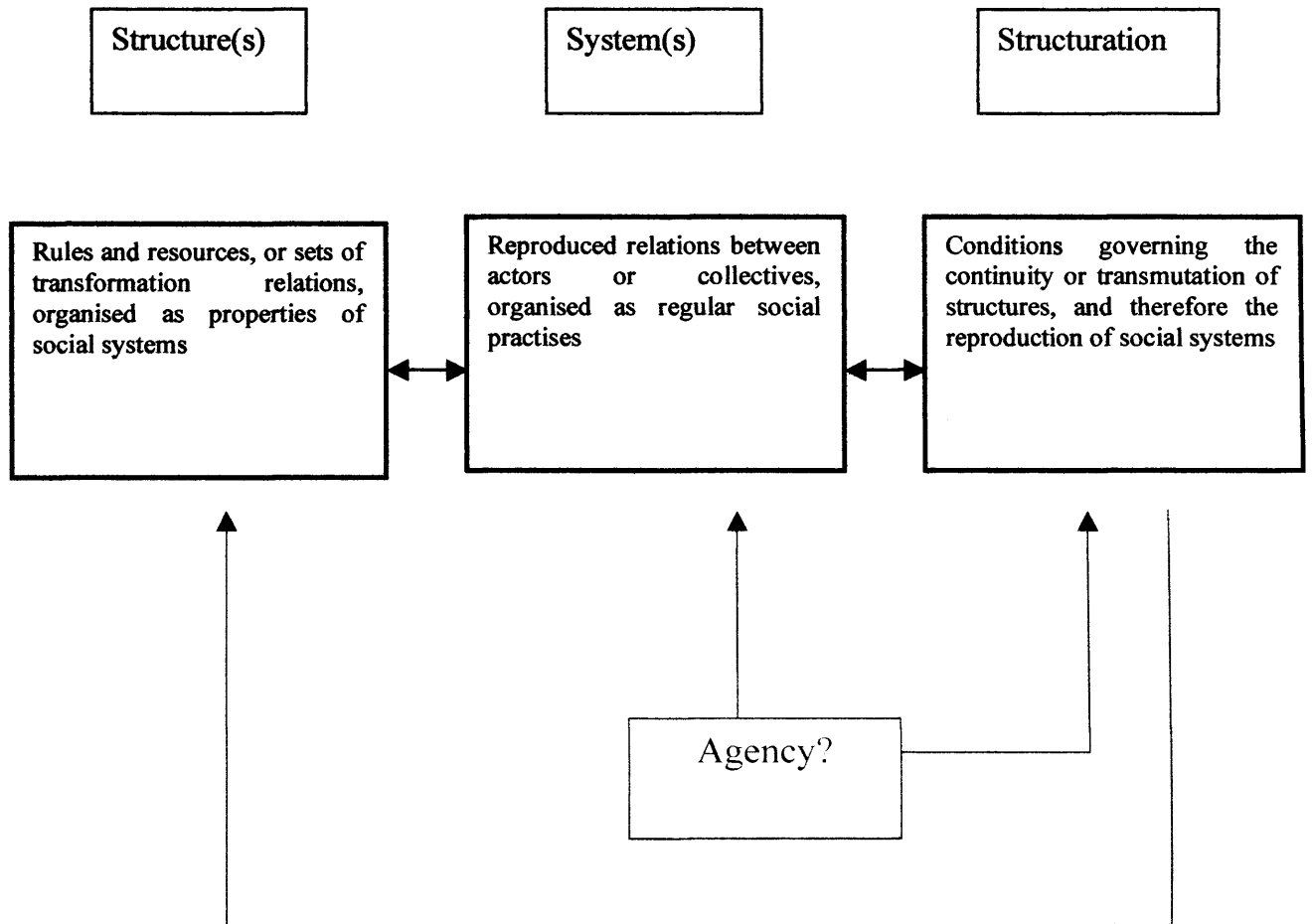


Fig. 3.0 Structures, Systems and Structuration (Initial diagram (in black) after Giddens, 1984: 25).

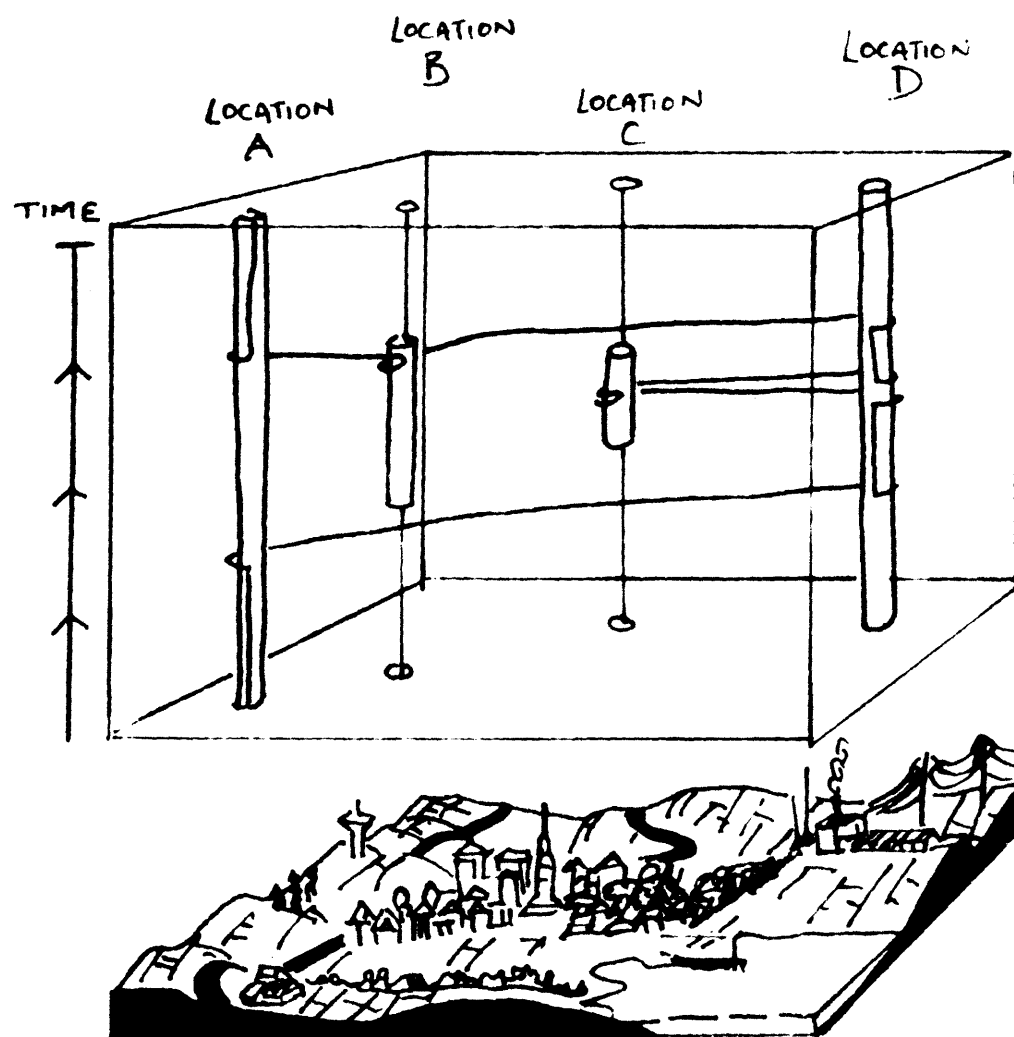


Fig. 3.1 A geo-visual realisation of Hägerstrand's model of space-time and human action (redrawn from Kraak 2003)

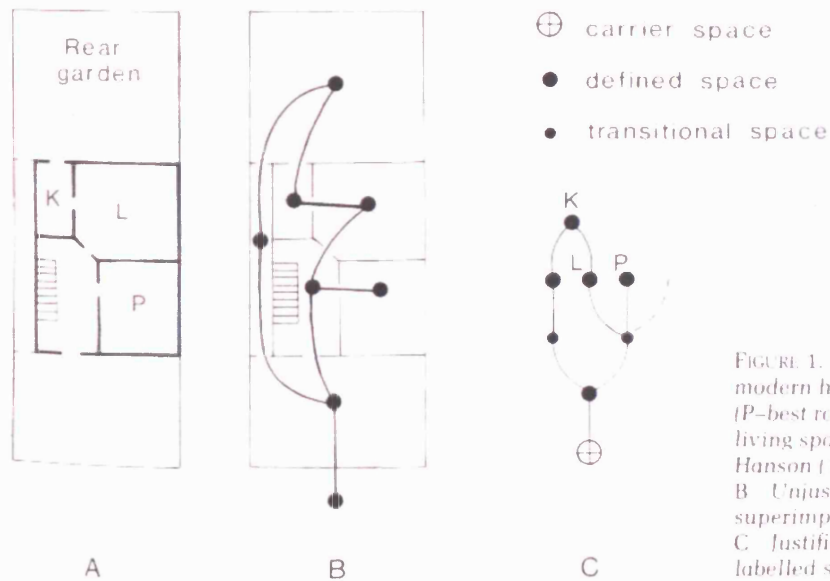


FIGURE 1. A Plan of a small modern house, ground floor only (P=bed room, K=kitchen, L=main living space). (After Hillier & Hanson (1984): figure 99.)
B Unjustified access (gamma) map superimposed.
C Justified access map with labelled spaces.

Fig. 3.2 Access Analysis: plan of house (a and b) and justified access map (c) demonstrating the permeability and interconnectedness of spaces within the house.' (after Hillier and Hanson 1984: Fig. 99).

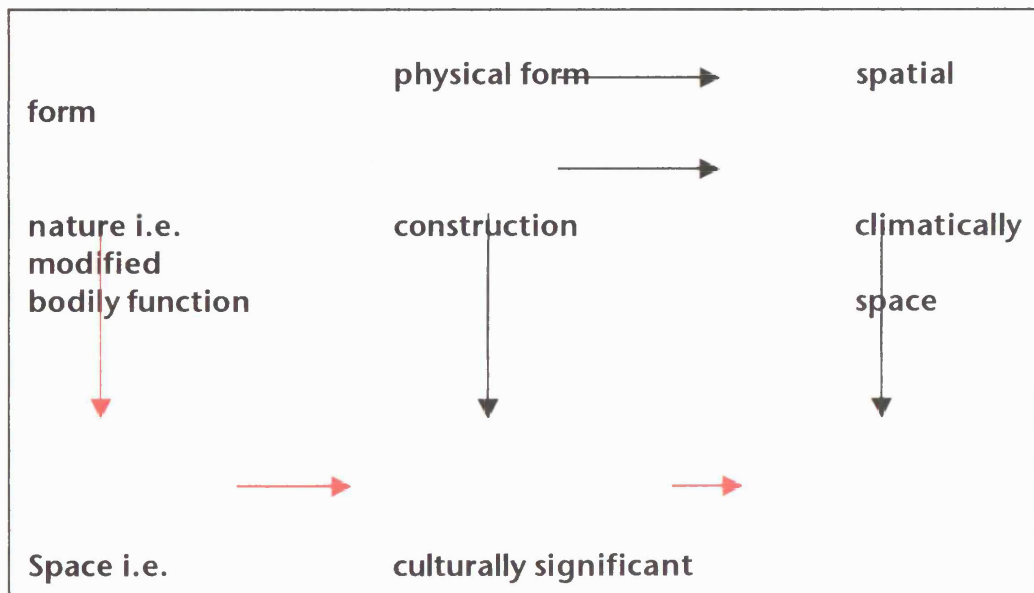


Fig. 3.3 'buildings as objects' (Initial diagram (in black) after Hillier 1996: 25).

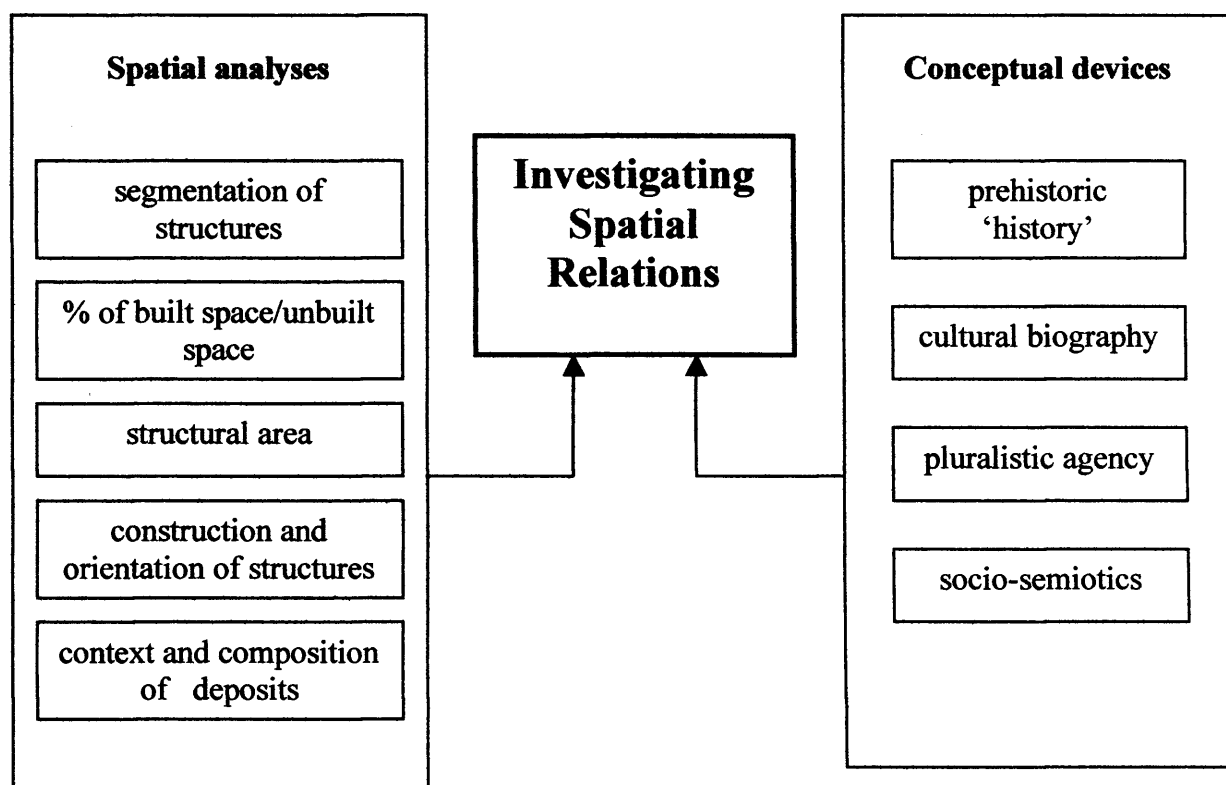


Fig. 3.4 Proposed theoretical and methodological framework for investigating spatial relations.

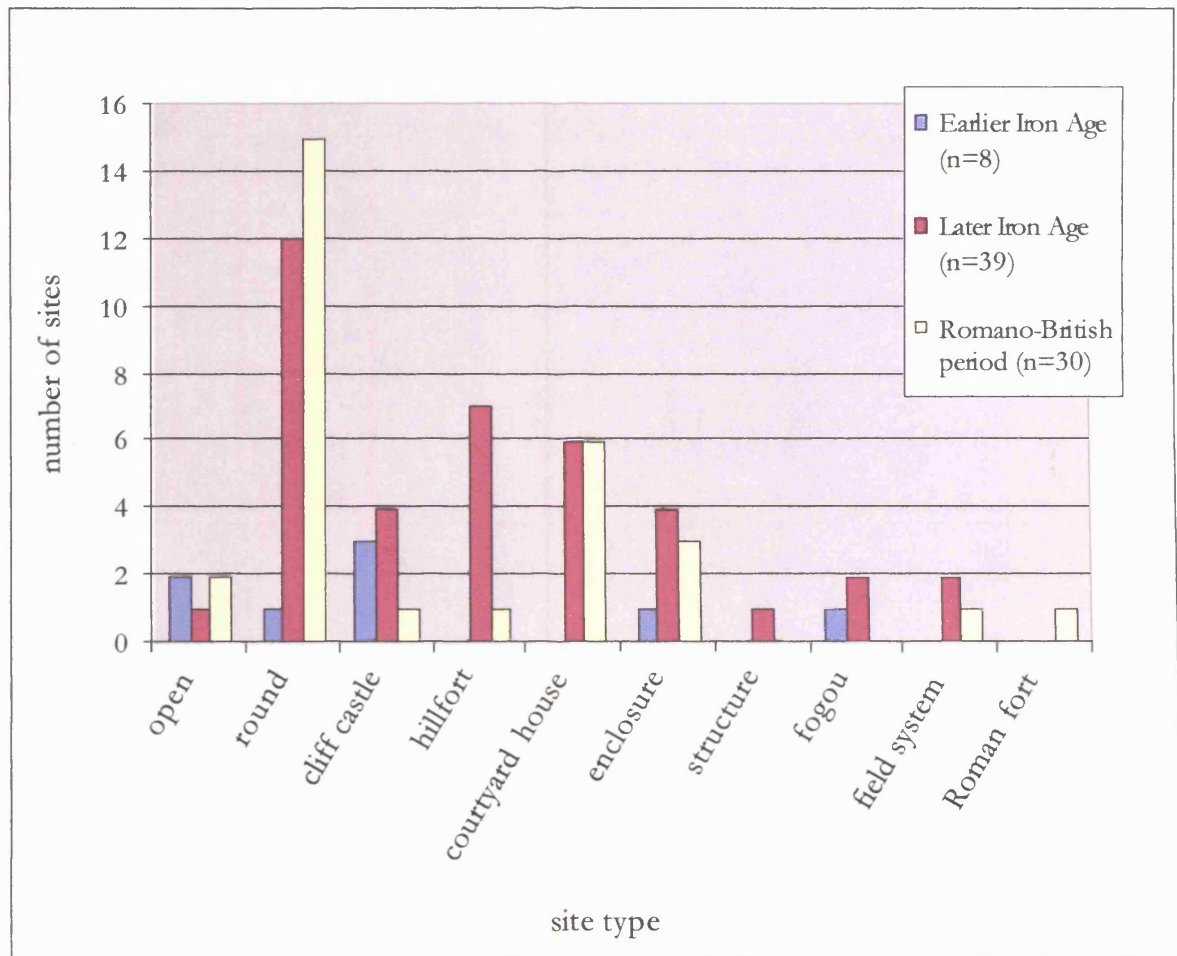


Fig. 3.5 Excavated data: breakdown of dataset by site 'type' and chronological period.

294

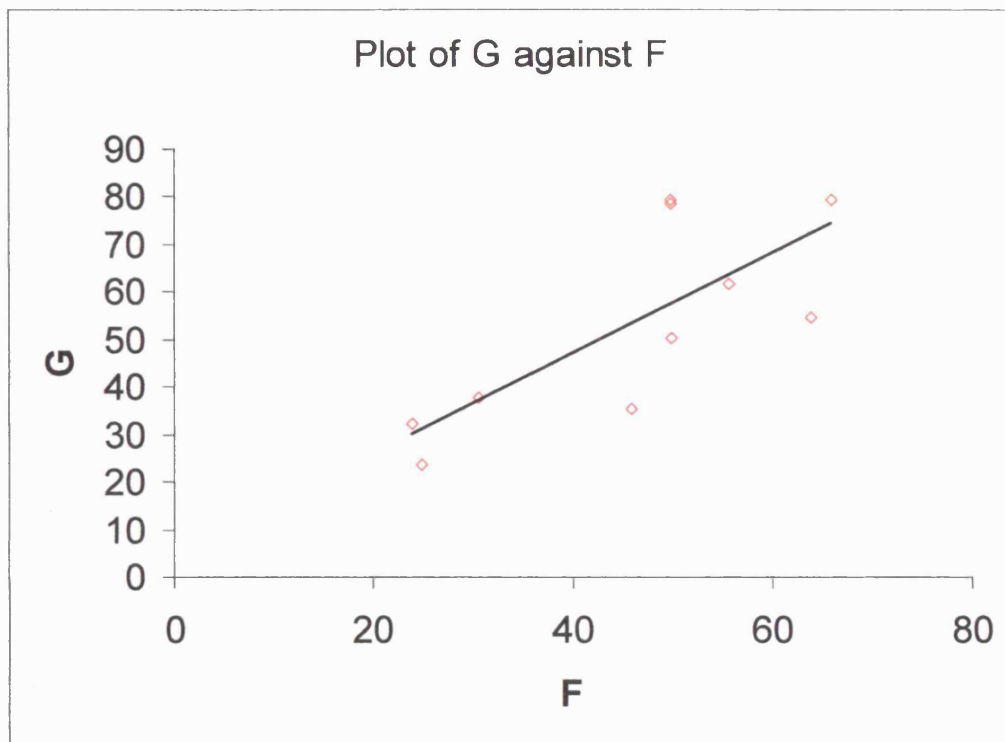


Fig. 3.7 Regression analysis for structural areas.

Site	Total Area m ² (Formulae (F))	Total Area m ² (Plan (P))	% Error (difference ÷P)×100
Goldherring F	30.8	37.6	18
Castle Gotha	55.68	61.76	9.7
Carn Brea Hut H	50.1	50.24	0.28
Carn Brea Hut 5	50.1	78.5	36.2
Bodrifty Hut M	64	54.74	16.9
Bodrifty Hut C2	50	79.25	36.9
Bodrifty Hut H	24	32.15	25.3
Bodrifty Hut G	46	35.28	30.38
Bodrifty Hut E	66	79.41	16.8
St Mawgan-in-Pyder Hut V	25	23.63	5.8

Fig. 3.8 Percentage of error involved between values calculated for total area.

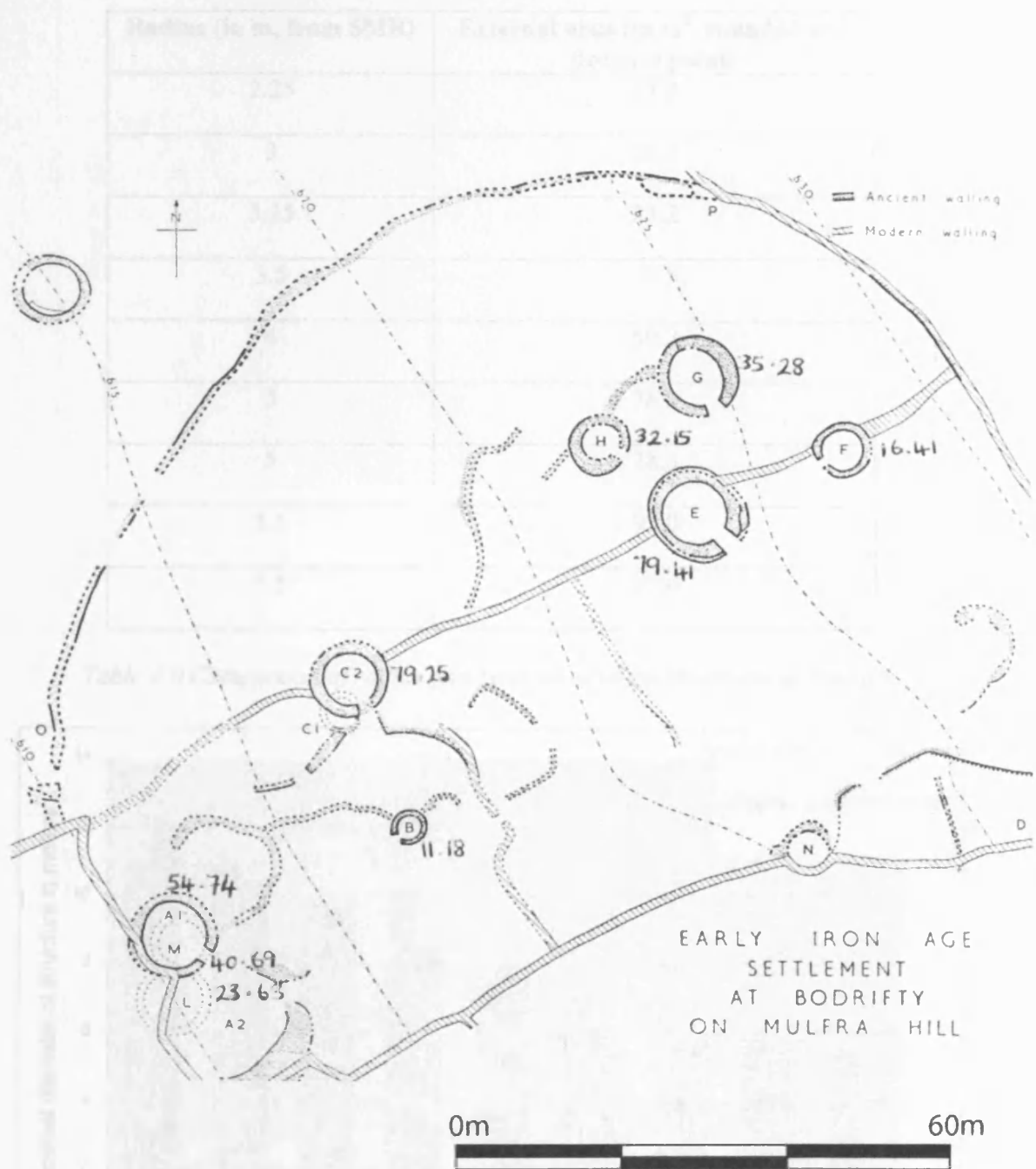


Fig. 3.9 The scale plan of Bodrifty (after Dudley 1956: 4). The figures adjacent to structures is the total area calculated using the dimensions given within the site report. Note that the scale of the structures does not appear to be relative to the dimensions given within the text.

Radius (in m, from SMR)	External area (in m ² , rounded to 1 decimal point)
2.25	15.9
3	28.3
3.25	33.2
3.5	38.5
4	50.2
5	78.5
5	78.5
5.5	95.0
5.5	95.0

Table 4.0 Comparison of radius and external area for structures at Bodrifty.

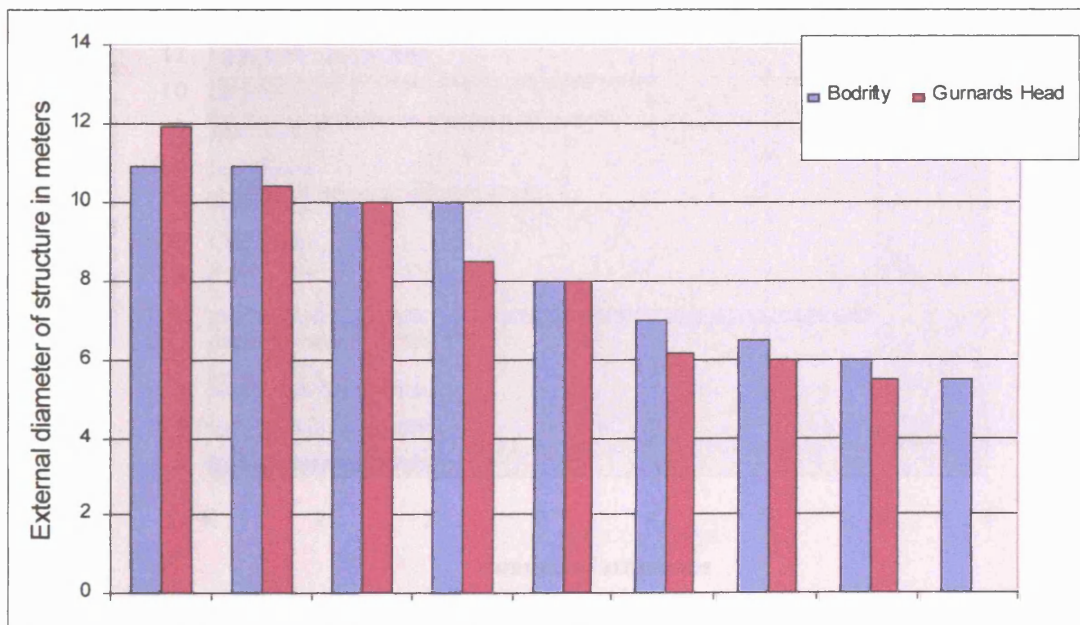


Fig. 4.1 Comparison of external structural diameters at Bodrifty and Gurnards Head.

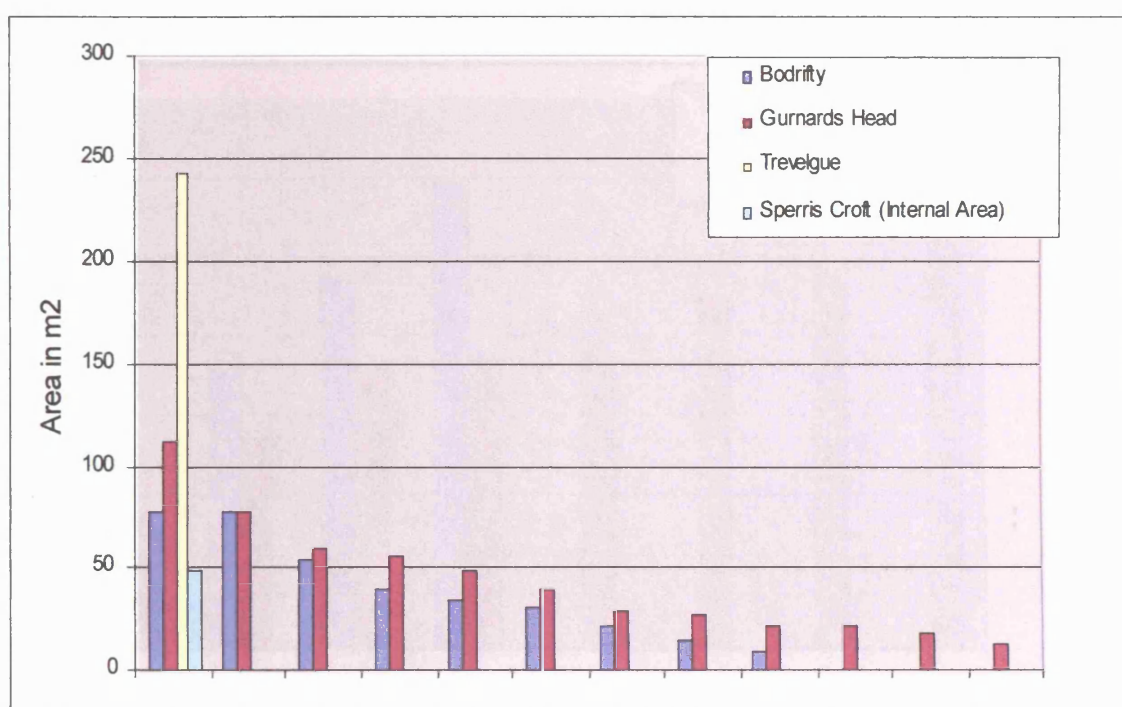


Fig. 4.2 Comparison of external areas of EIA/LIA structures.

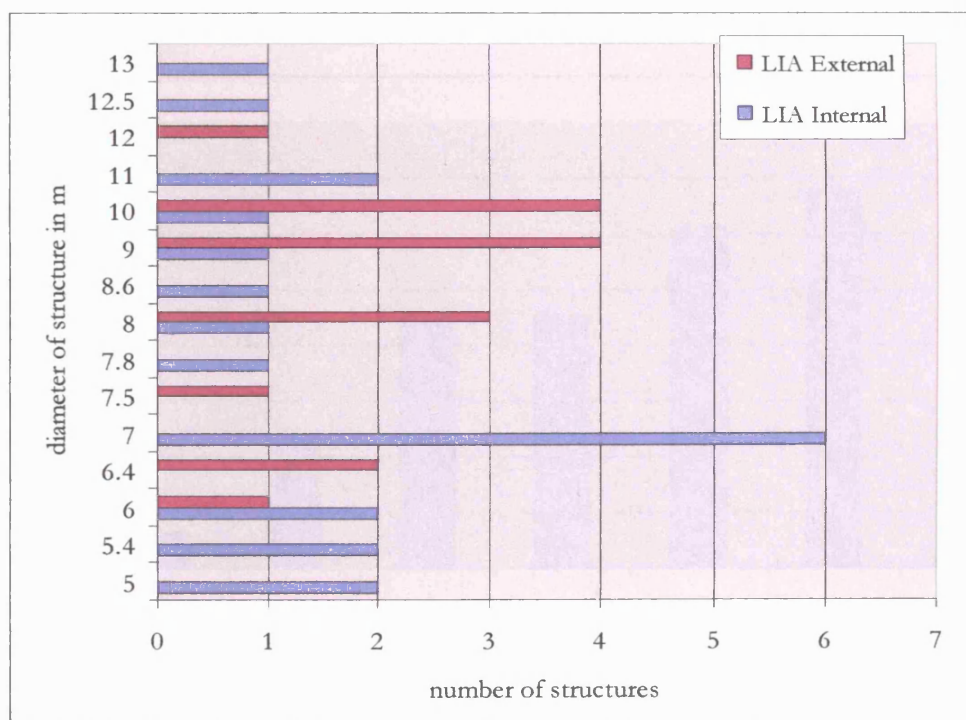


Fig. 4.3 Comparison of internal and external diameters of structures of LIA date (diameter range based on values given within site reports).

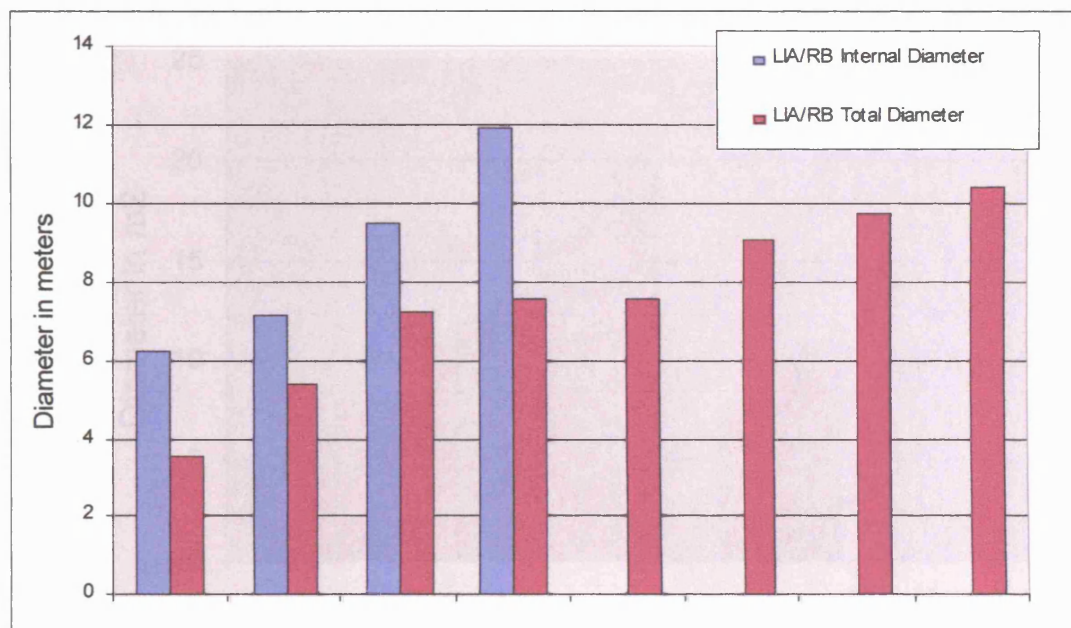


Fig. 4.4 Internal and total diameters of LIA/RB structures.

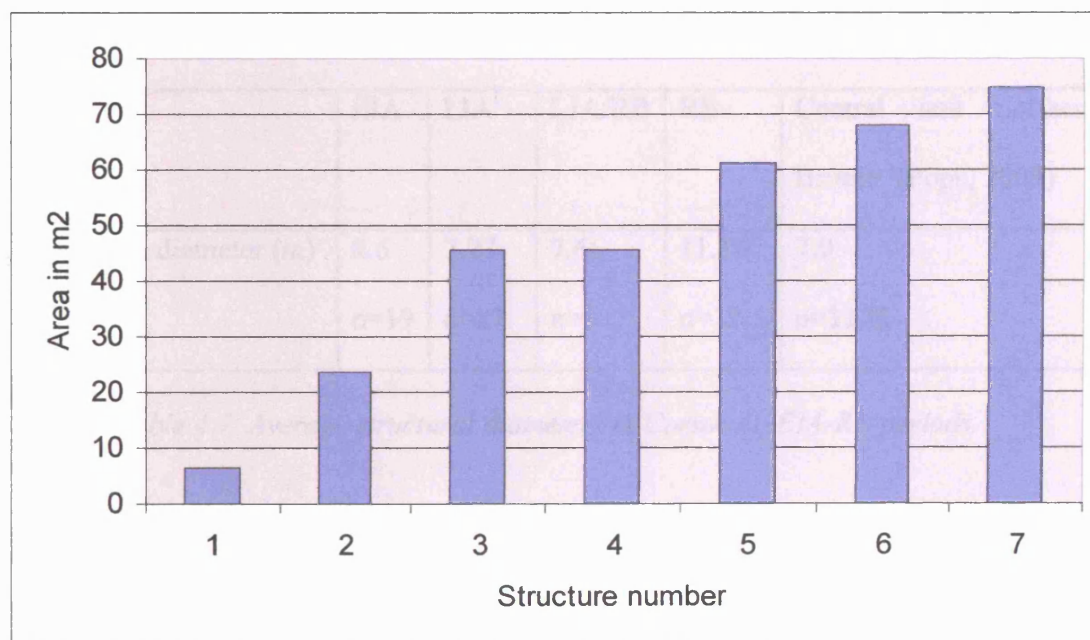


Fig. 4.5 External areas of structures at St Mawgan-in-Pyder (n=7).

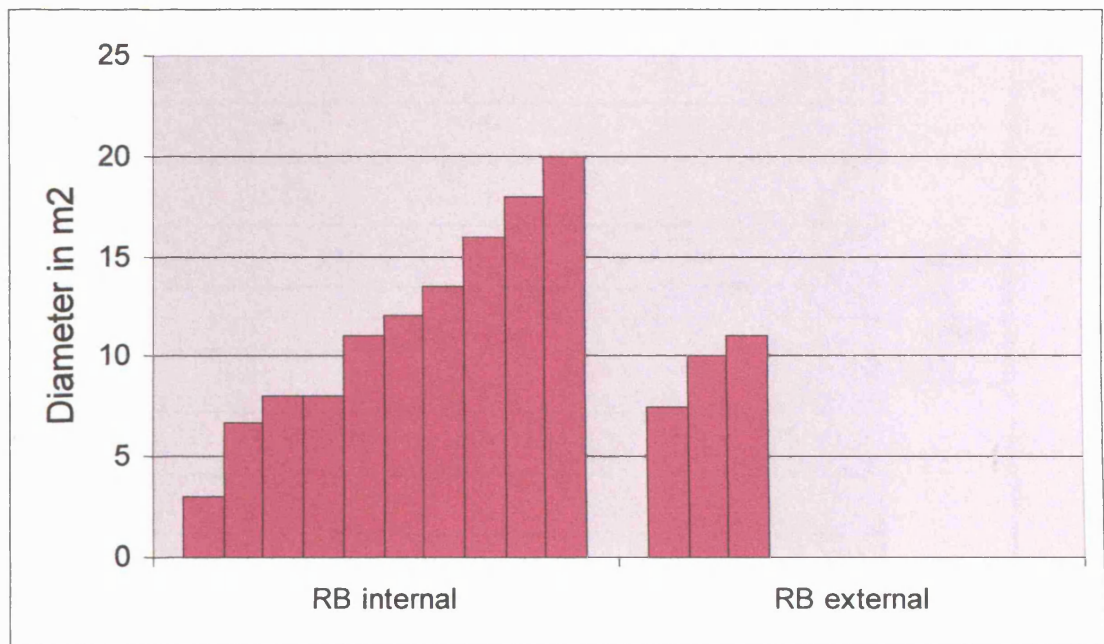


Fig. 4.6 Comparison of internal and external diameters of RB structures.

	EIA	LIA	LIA/RB	RB	Central and northern Britain (Pope, 2003)
Mean diameter (m)	8.6	7.77	7.66	11.14	7.9
	n=19	n=27	n=9	n=12	n=1178

Table 4.7 Average structural diameters in Cornwall, EIA-RB periods.

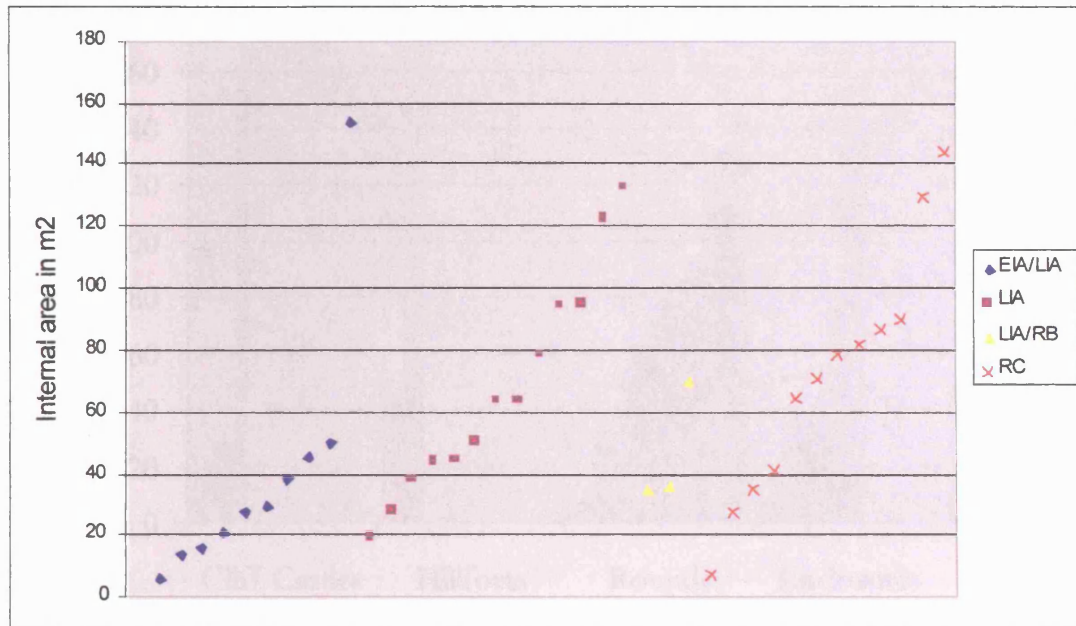


Fig. 4.8 A comparison of internal structural area, across chronological periods.

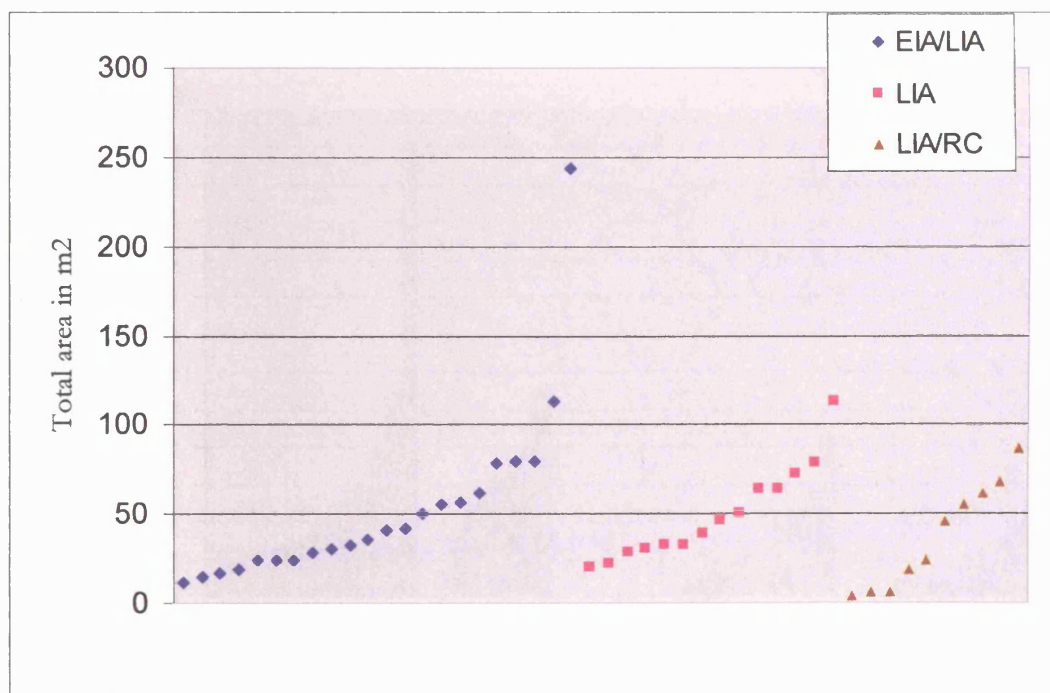


Fig. 4.9 A comparison of total structural area, across chronological periods.

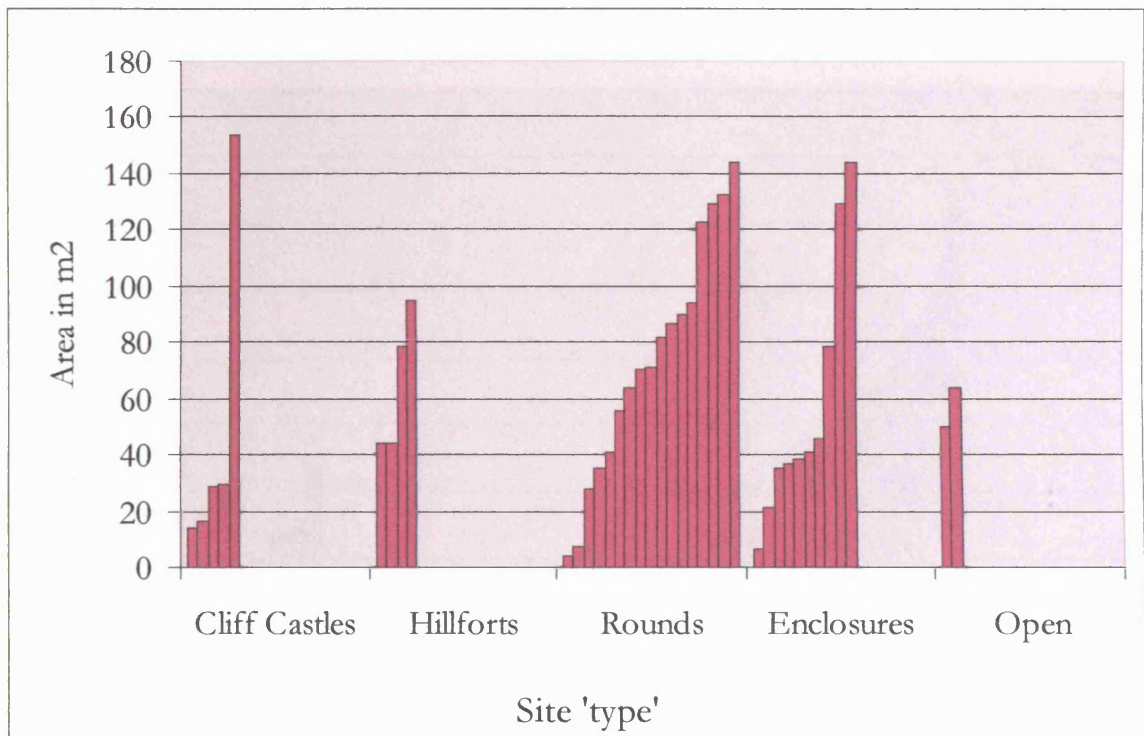


Fig. 4.10 A comparison of Internal structural area and settlement 'type'.

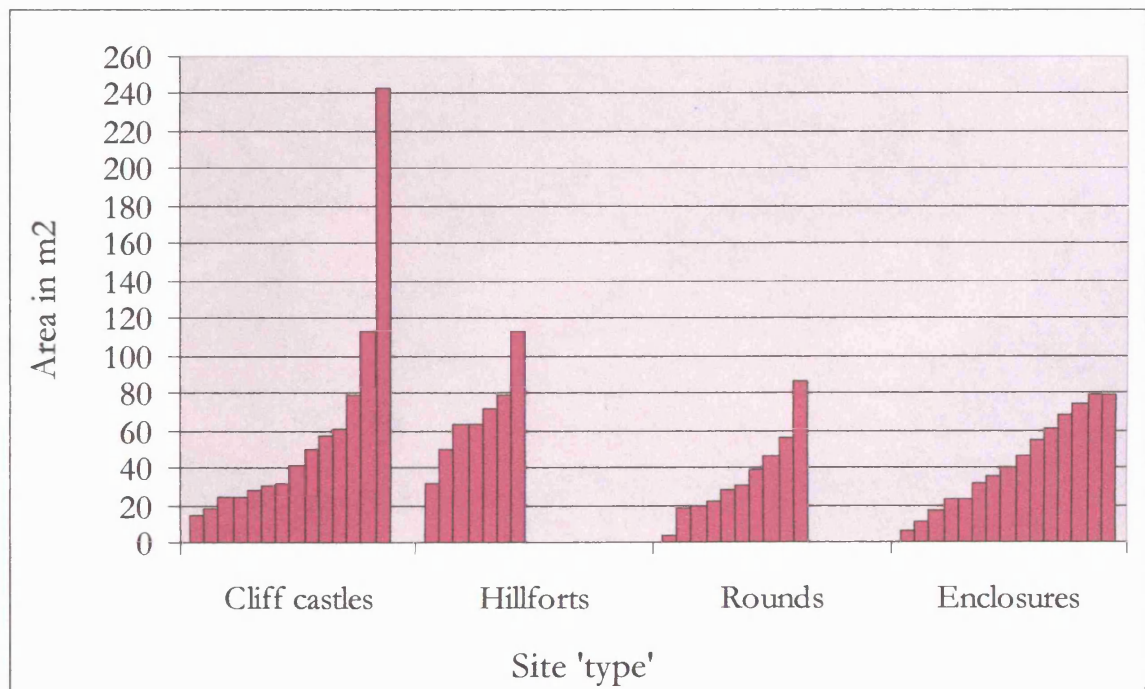


Fig. 4.11 A comparison of external structural area and settlement type.

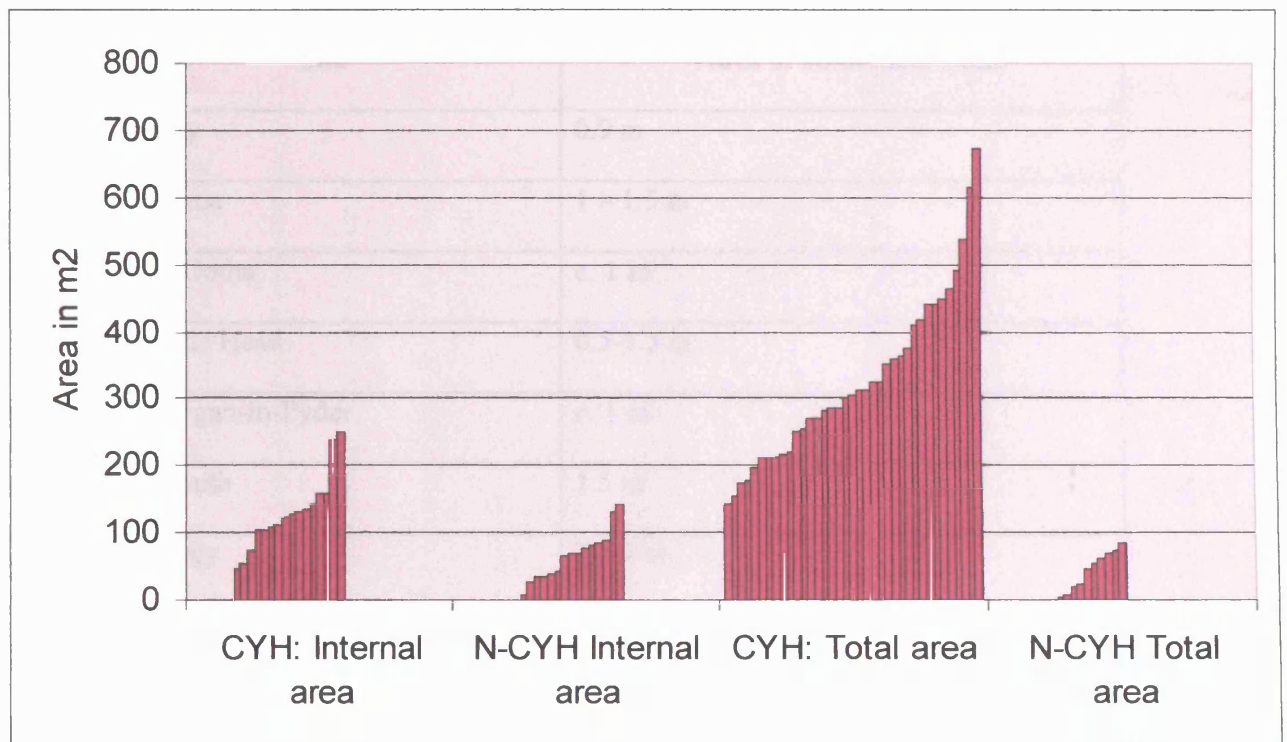


Fig. 4.12 Comparison of structural areas: courtyard house structures and non-courtyard house structures of LIA-RB and RB date.



Fig. 4.13 Reconstruction of structures at Trethurgy, employing thatch as a roofing material (after Quinnell 2004:frontispiece).

Site	Width of structural walls
Bodrifty	0.9 m
Carn Brea	1 – 1.5 m
Castle Gotha	c. 1 m
Gurnards Head	0.5-1.5 m
St Mawgan-in-Pyder	c. 1 m
Trebarveth	1.5 m
Trethurgy	1 – 2 m
Trevelgue Head	1.8 m

Table 4.14 Range of wall width of stone-built structures at key LIA and RB sites.

Construction material/form	Dataset from Cornwall (n=82)	Dataset for Northern Britain (from Pope 2003)
Stone-built outer wall	54%	26%
Post-built outer wall	14%	14%
Turf-built outer wall	5%	3%
Stake-built	4%	3%
No evidence for outer wall	23%	n/a

Fig. 4.16 Breakdown of structural material and form for non-courtyard houses: a comparison between the Cornish dataset and that of Pope (2003).

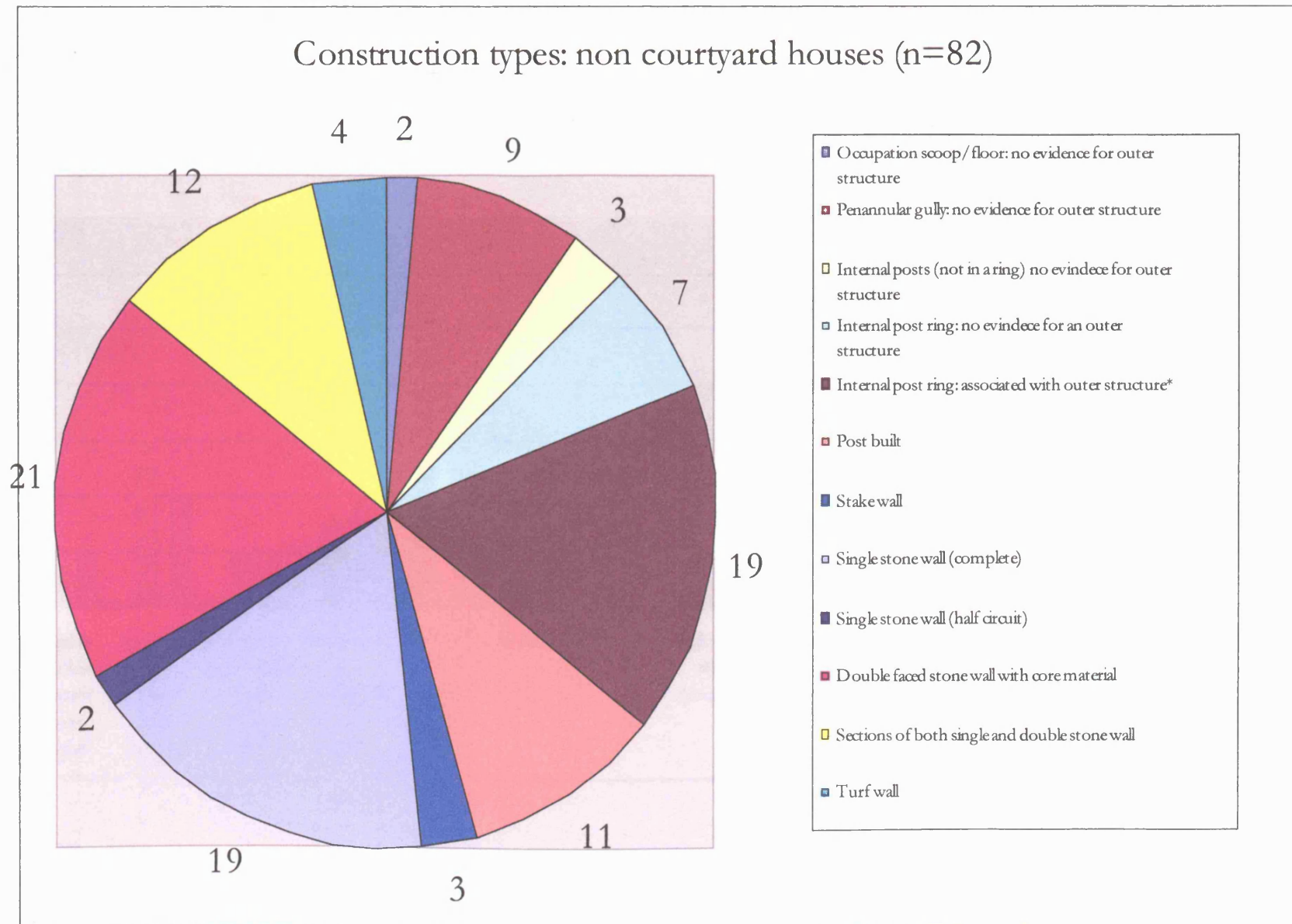


Fig. 4.15 Construction designs EIA/LIA – RB periods.

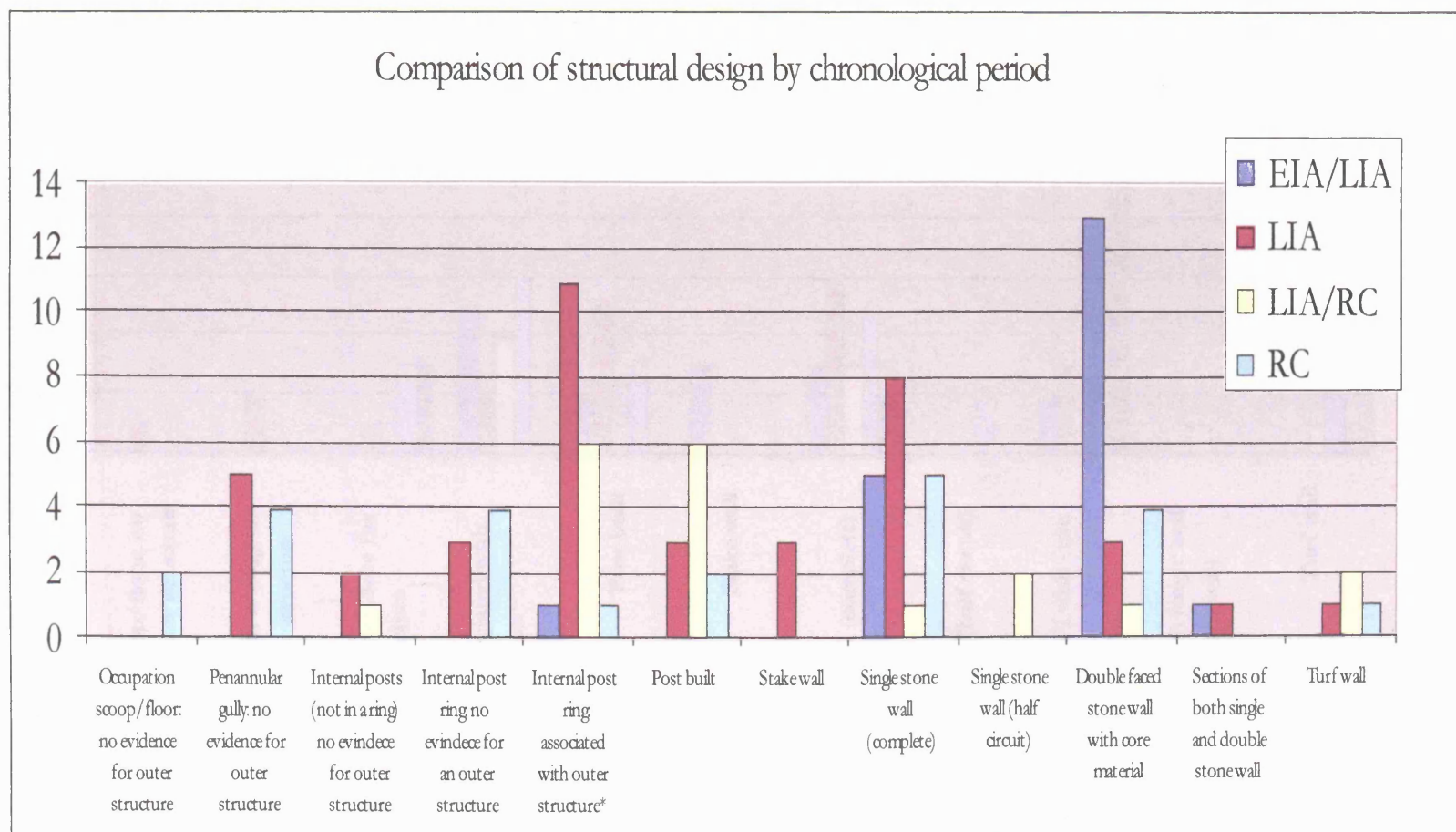


Fig. 4.17 Structural design and chronological period.

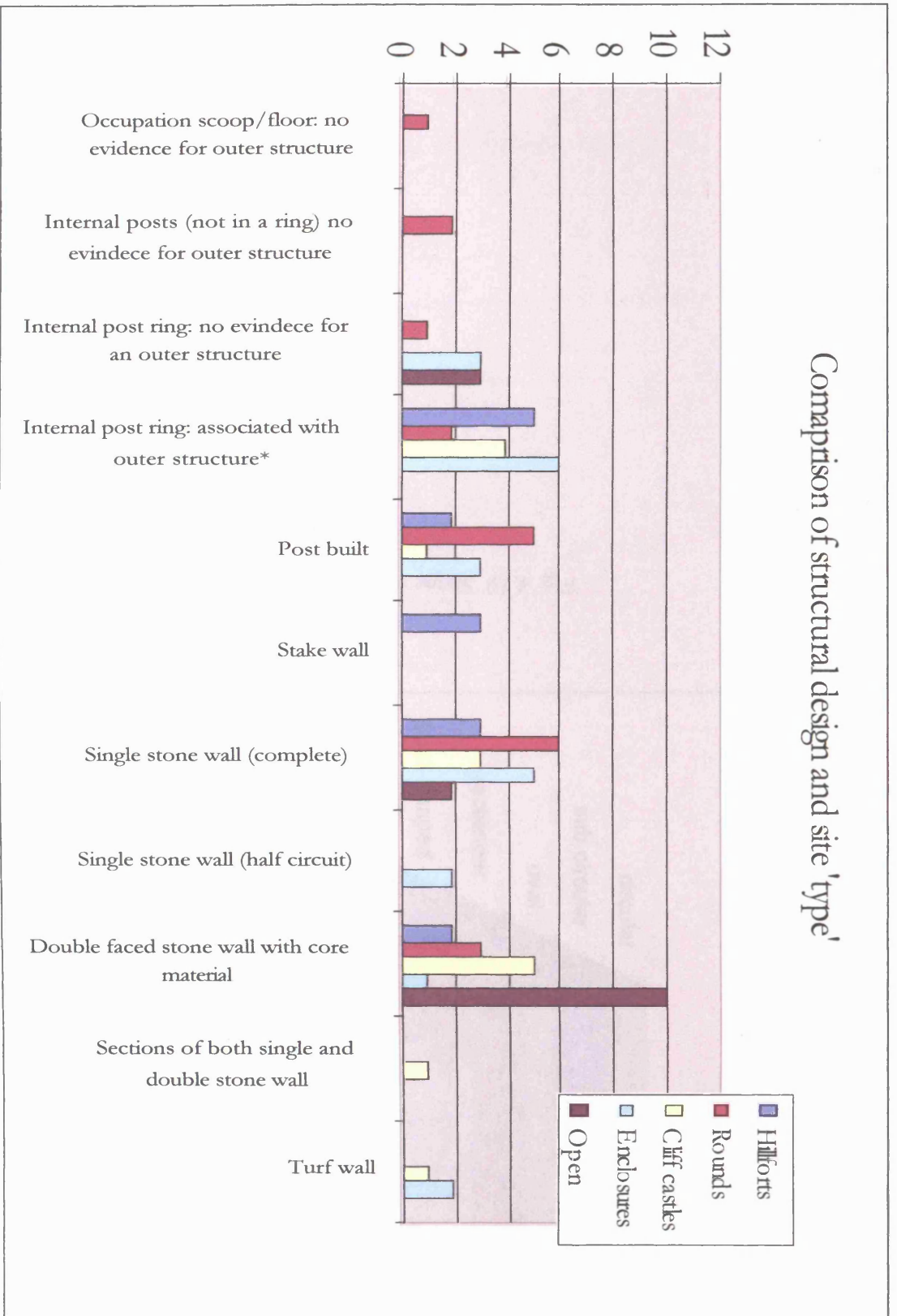


Fig. 4.18 Structural design and site type.

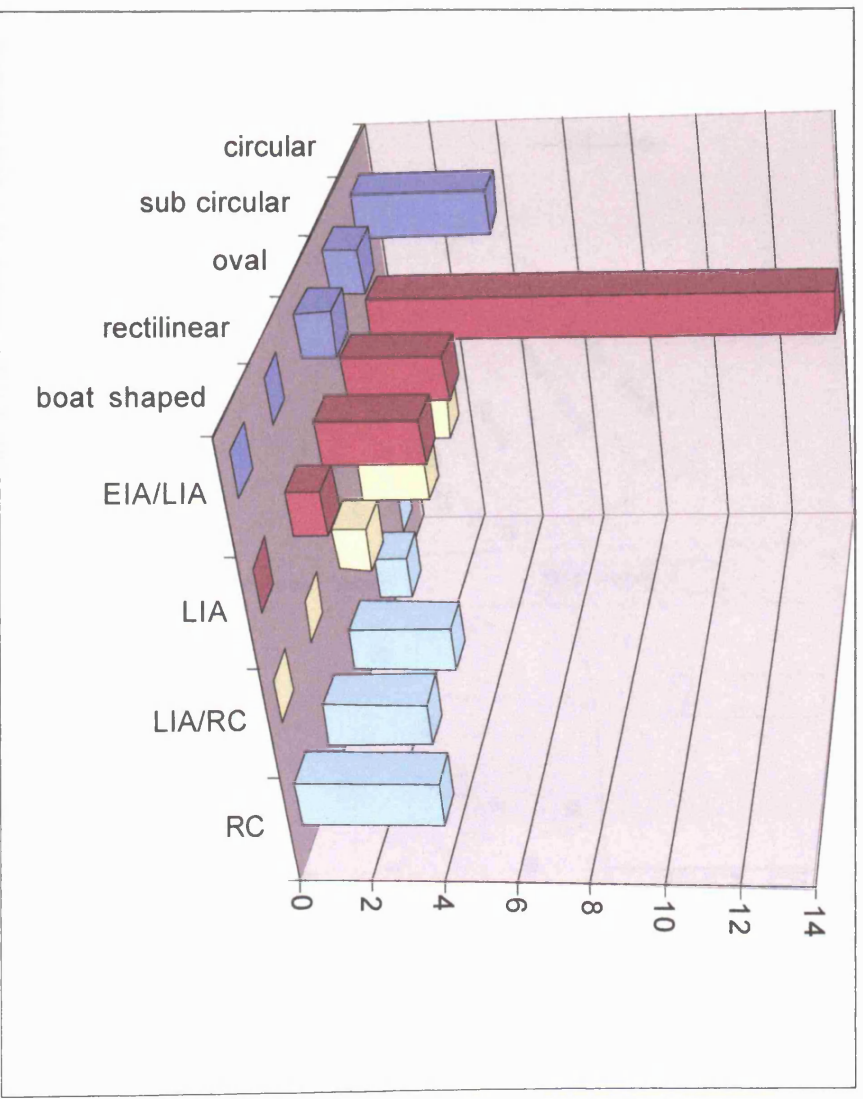


Fig. 4.19 Shape in plan and chronological period.

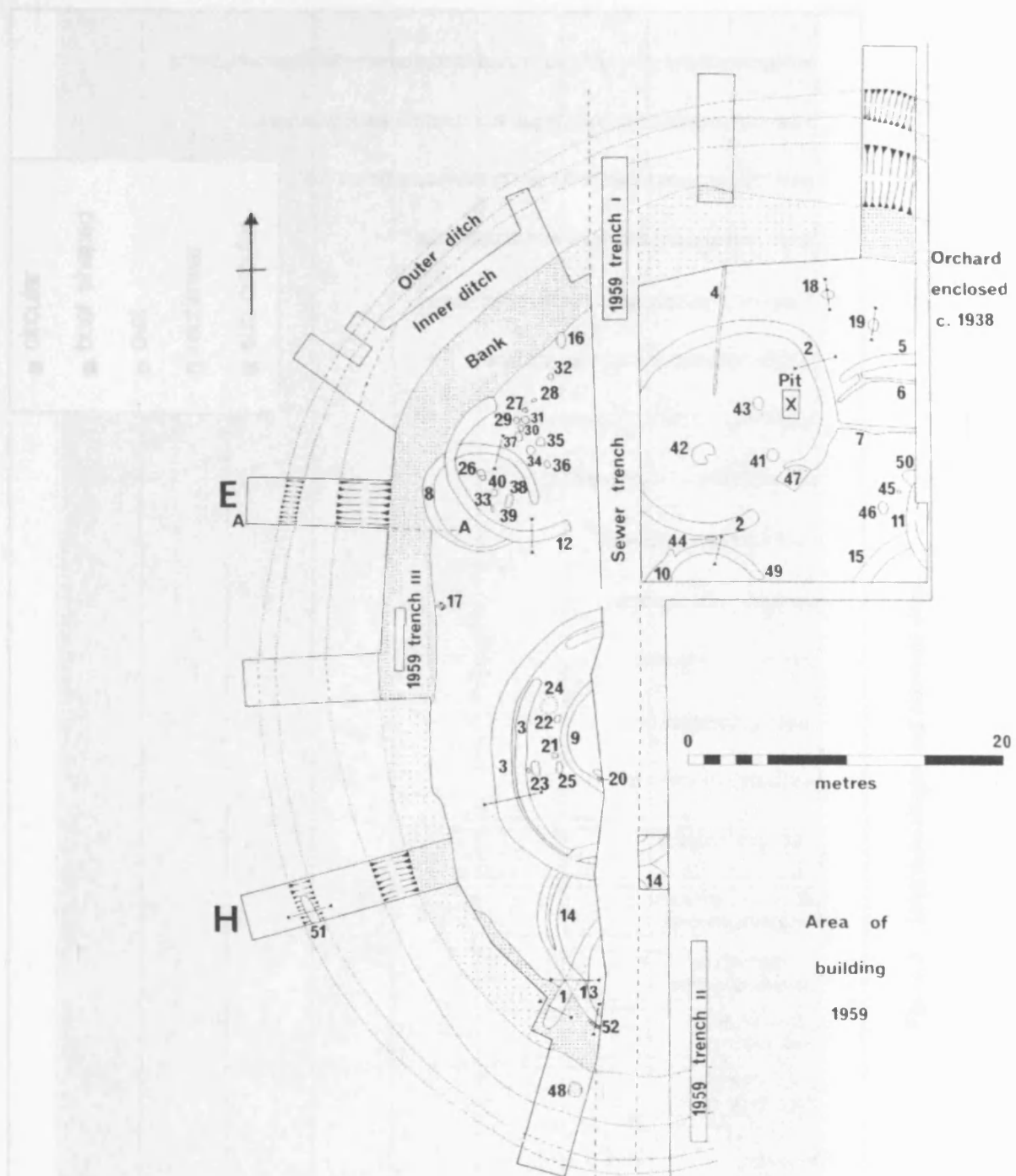


Fig. 4.20 Oval structures at Threemilestone round (after Schwieso 1976: 53).

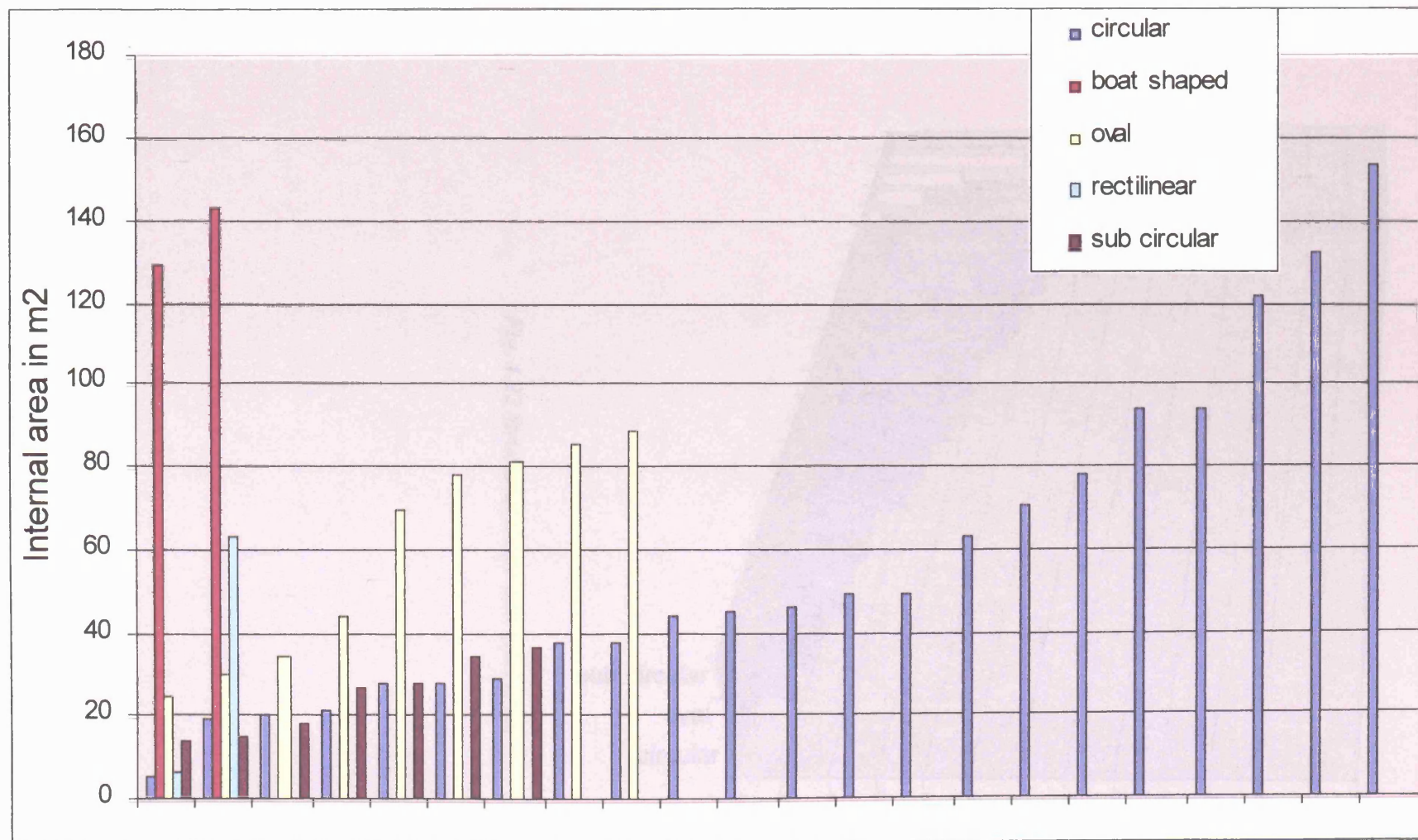


Fig. 4.21 Structure shape and internal area.

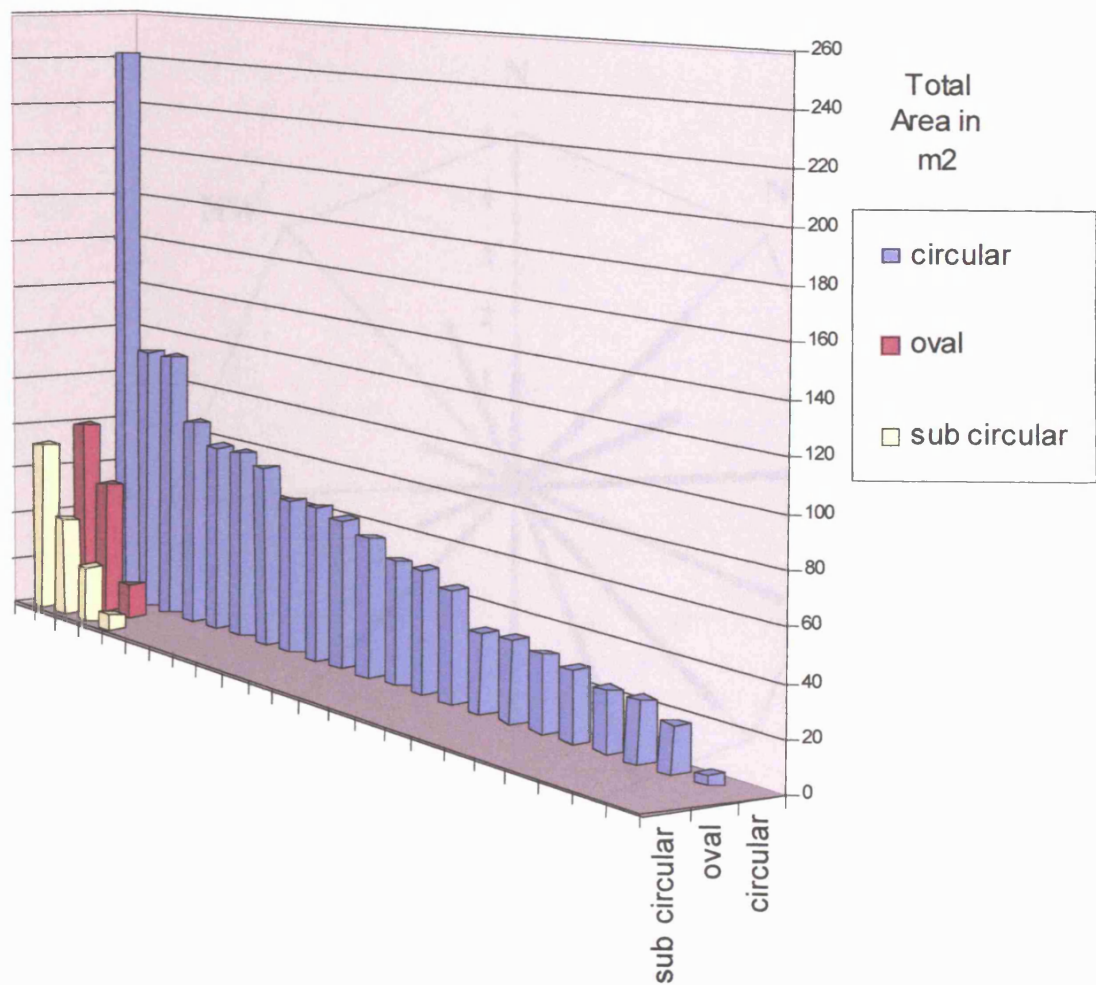


Fig. 4.22 Structural shape and total area.

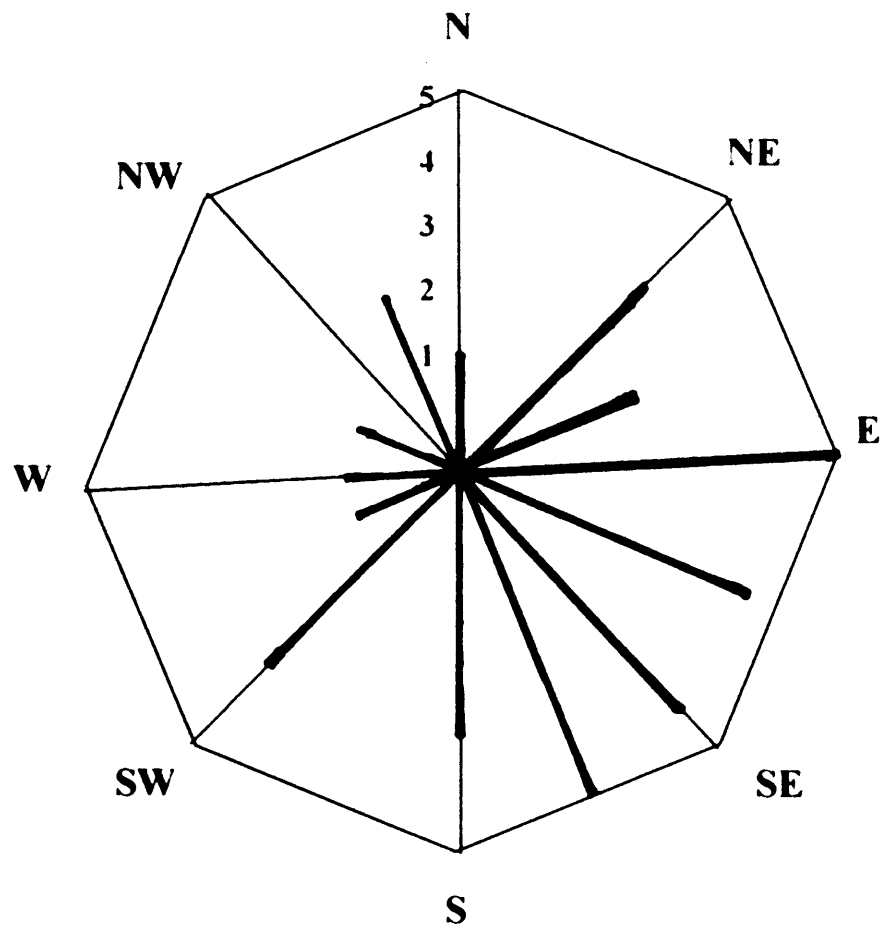
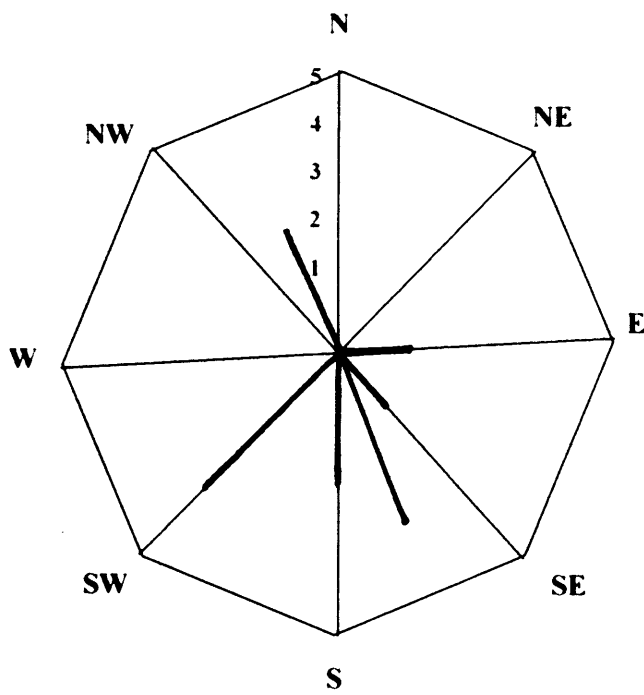
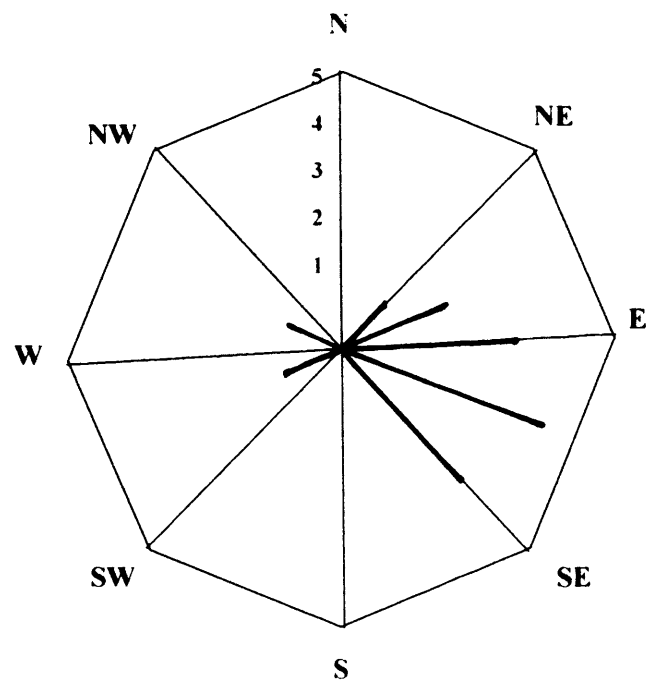


Fig. 4.23 Entranceway orientation EIA-RB periods ($n=35$).

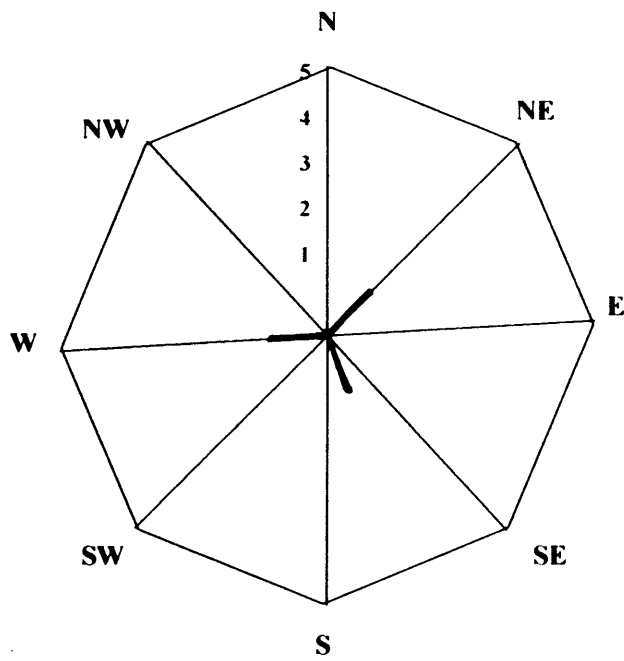
EIA/LIA



LIA



LIA/RB



RB

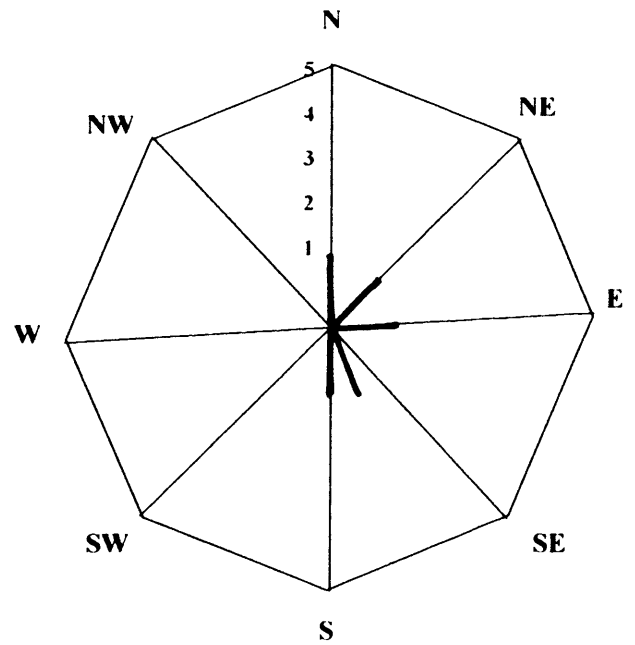


Fig. 4.24 Entranceway orientation categorised by period.

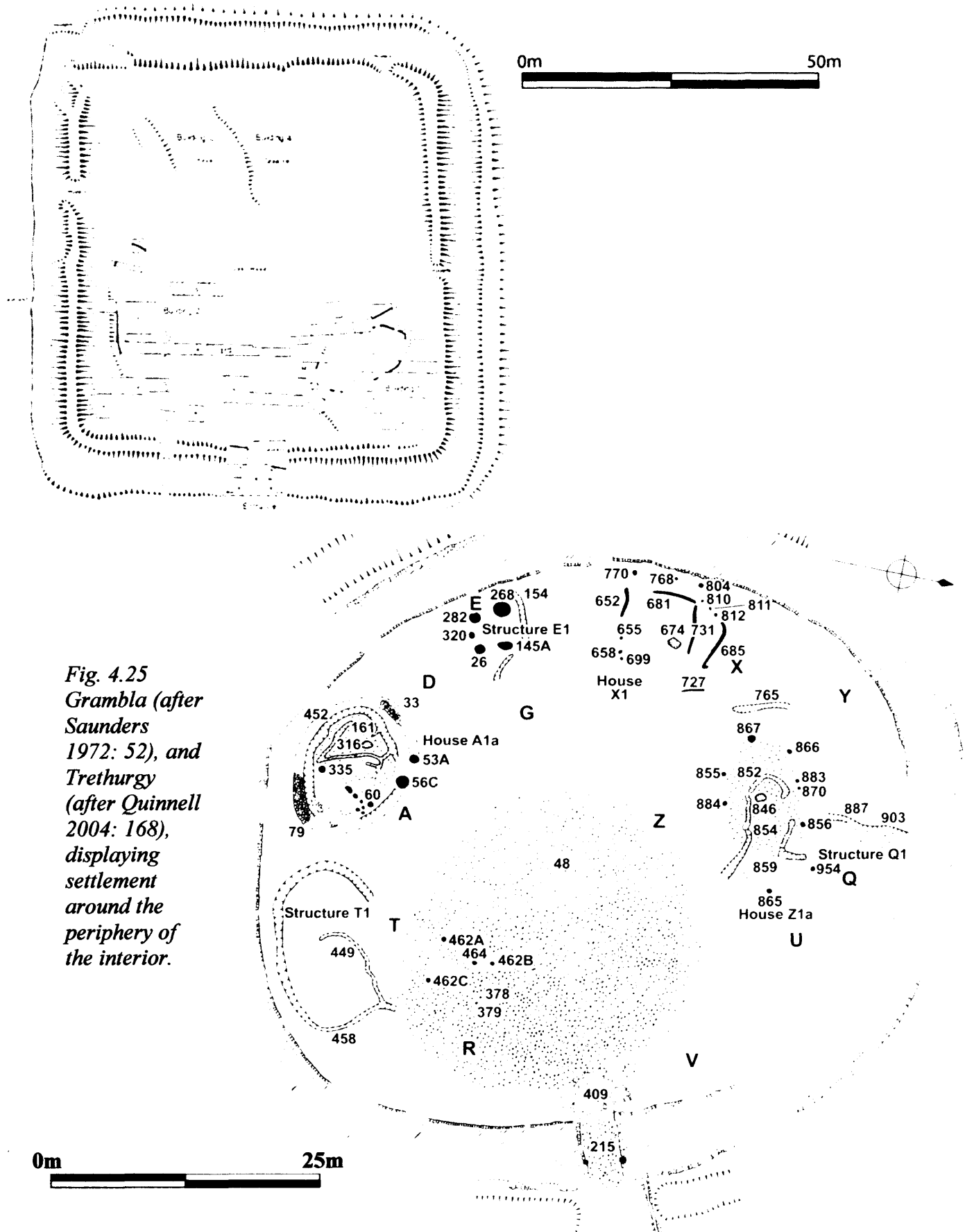


Fig. 4.25
Grambla (after
Saunders
1972: 52), and
Trethurgy
(after Quinnell
2004: 168),
displaying
settlement
around the
periphery of
the interior.

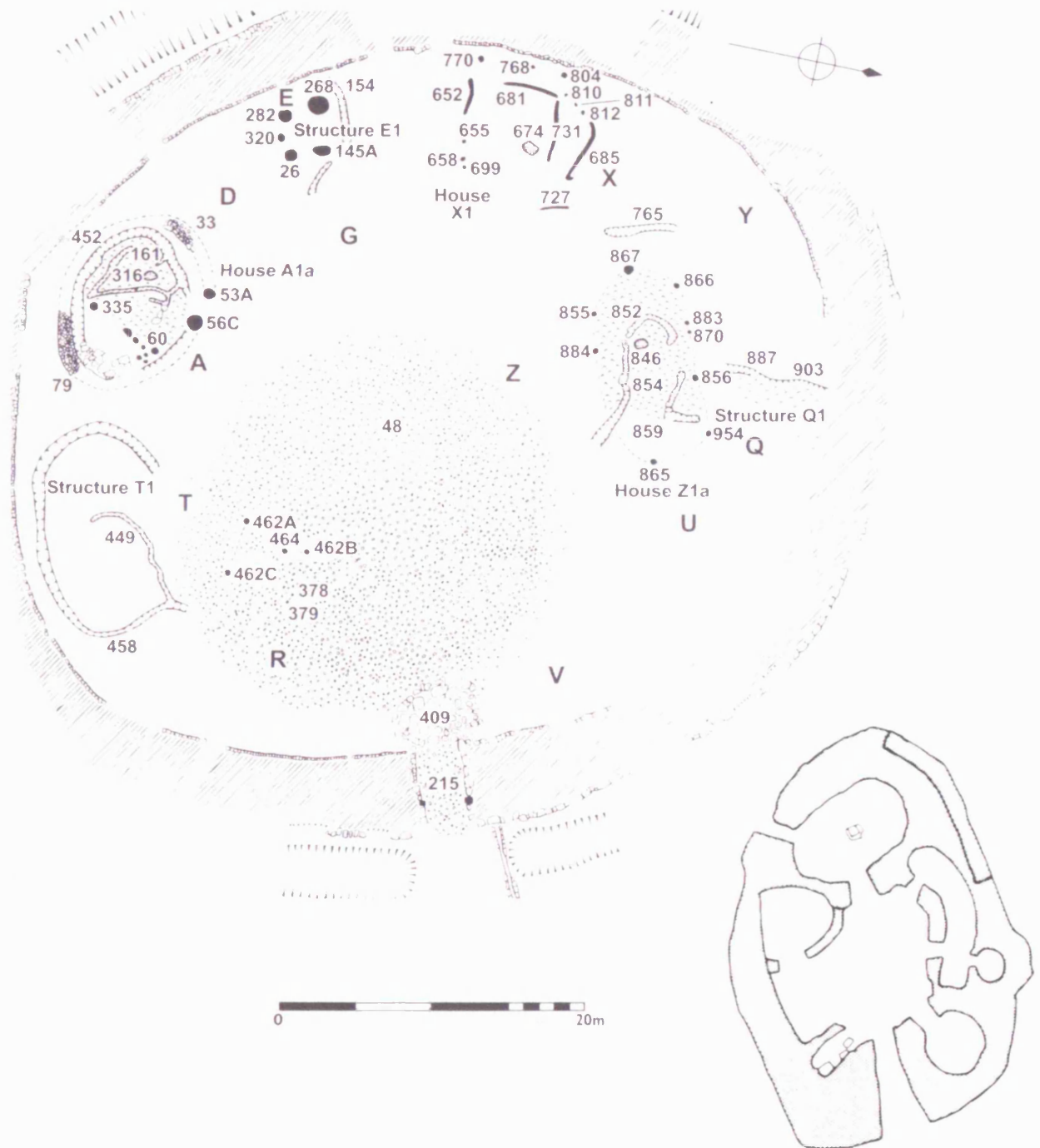


Fig. 4.26 Comparison of the internal layout of a) a typical round (Trethurgy after Quinnell 2004: 168) and b) a typical courtyard house from Chysauster (after Christie 1997: 18).

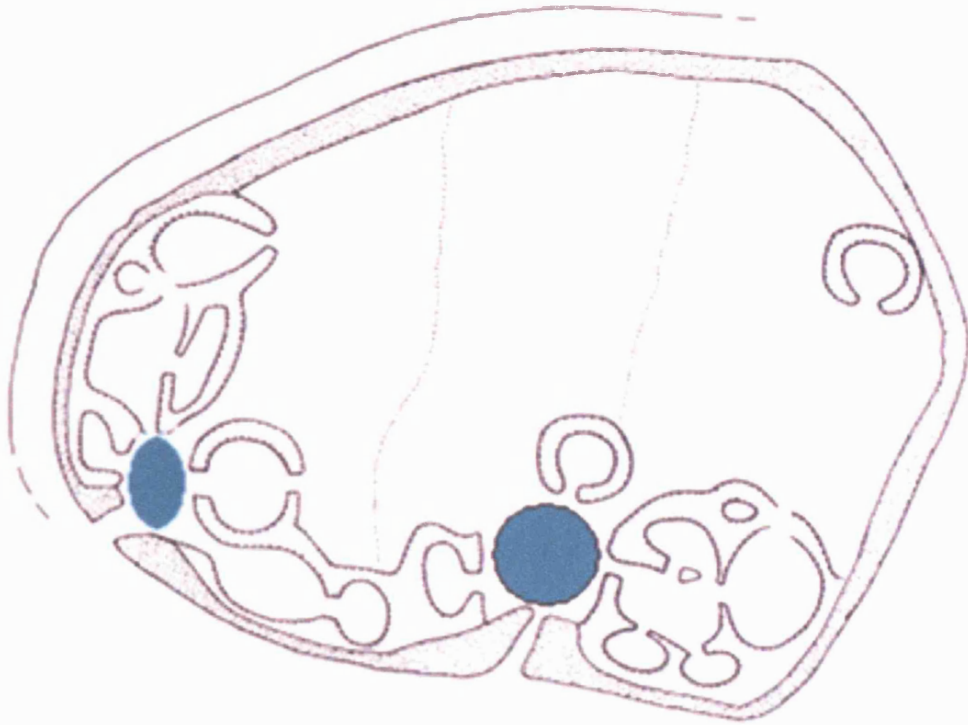
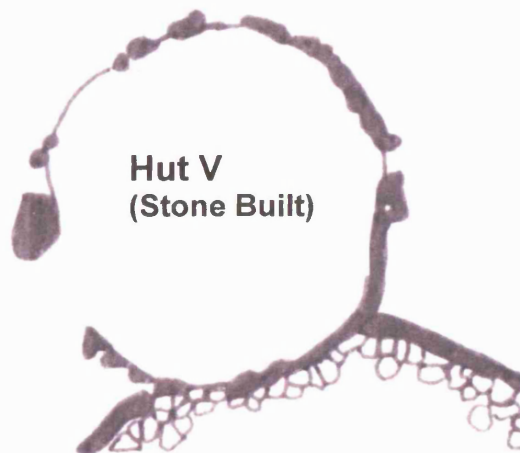


Fig. 4.27 Central areas of focus at Porthmeor (coloured blue) (after Cunliffe 1974: 190, not to scale).



0m

10m



Fig. 4.30 Hut V, St Mawgan-in-Pyder (redrawn from Threipland 1956: 36).

Rounds

Site	Location of structures/features						Orientation of structures/features			
	<i>associated with bank</i>	<i>within 10 m of bank/ditch</i>	<i>within 15 m of bank/ditch</i>	<i>in centre</i>	<i>throughout interior</i>	<i>Centre kept 'empty'</i>	<i>facing entrance</i>	<i>facing bank</i>	<i>facing interior</i>	<i>mixed orientations</i>
Threemilestone	yes				yes	No			some	?
Shortlandsend			yes			Unknown	possibly		no	
Trevisker		yes (both inner ditch and outer bank)		yes (in relation to outer enclosure)		yes (within inner enclosure)	house 1			
Penhale		Some	some			Yes			yes	
Castle Gotha	some ?	Yes				yes?				
Reawla		Yes				No				
Trethurgy	some ?	Yes				Yes	yes		yes	
Goldherring		Yes				Unknown				
Porthmeor	yes				yes	No				
Wicca				yes	no	No				

Fig. 4.28 Distribution of structures within the interior: rounds.

Enclosures

Site	Location of structures/features						Orientation of structures/features			
	<i>associate d with bank</i>	<i>within 10 m of bank/ditc h</i>	<i>within 20 m of bank/di tch</i>	<i>in centre</i>	<i>throug hout interior</i>	<i>Centre kept 'empty'</i>	<i>facing entranc e</i>	<i>facing bank</i>	<i>facing interior</i>	<i>mixed orientati ons</i>
St Mawgan- in-Pyder	some	Yes	Yes			yes?	Some		Possibly also	
Carvossa	no info						No info			
Grambla	no	Yes				yes?	No info			
Trevinnick	no	Yes	Yes			unknow n	yes?			
Bodrifty	no?				yes	no	No info			

Fig. 4.29 Distribution of structures within the interior: enclosures.

Site type	Site name	% of built space	Period
Hillfort	Killibury	30.28%	LIA
Hillfort	Carn Brea	0.94%	LIA
Cliff castle	Trevelgue	16.37%	EIA/LIA
Cliff castle	Gurnards Head	1.41%	EIA/LIA
Courtyard house settlement	Goldherring (phase 2)	27.41%	RB
Courtyard house settlement	Porthmeor	24.56%	LIA RB
Enclosure	Bodrifty (Phase 1)	3.07%	LIA
Enclosure	Bodrifty (Phase 2)	3.47%	LIA
Enclosure	St Mawgan-in-Pyder	20.89%	LIA/RB
Enclosure	Trevinnick	75%	RB
Round	Goldherring (Phase 1)	5.49%*	LIA
Round	Threemilestone	4.32%*	LIA
Round	Castle Gotha	42.5%	LIA/RB
Round	Trevisker	21.7%	LIA
Round	Trethurgy	17.85%	RB
Round	Shortlandsend	41.31%	RB

Fig. 4.31 Calculations of built space (* indicates a probable underestimation of built percentage).

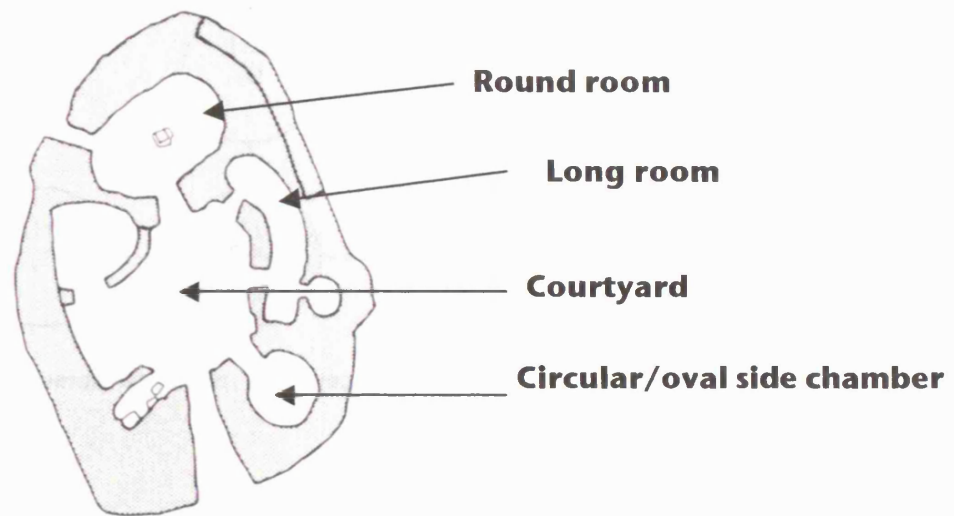


Fig. 5.0 Courtyard house from Chysauster, displaying courtyard, round room and circular/oval side chambers (after Christie 1997:18).

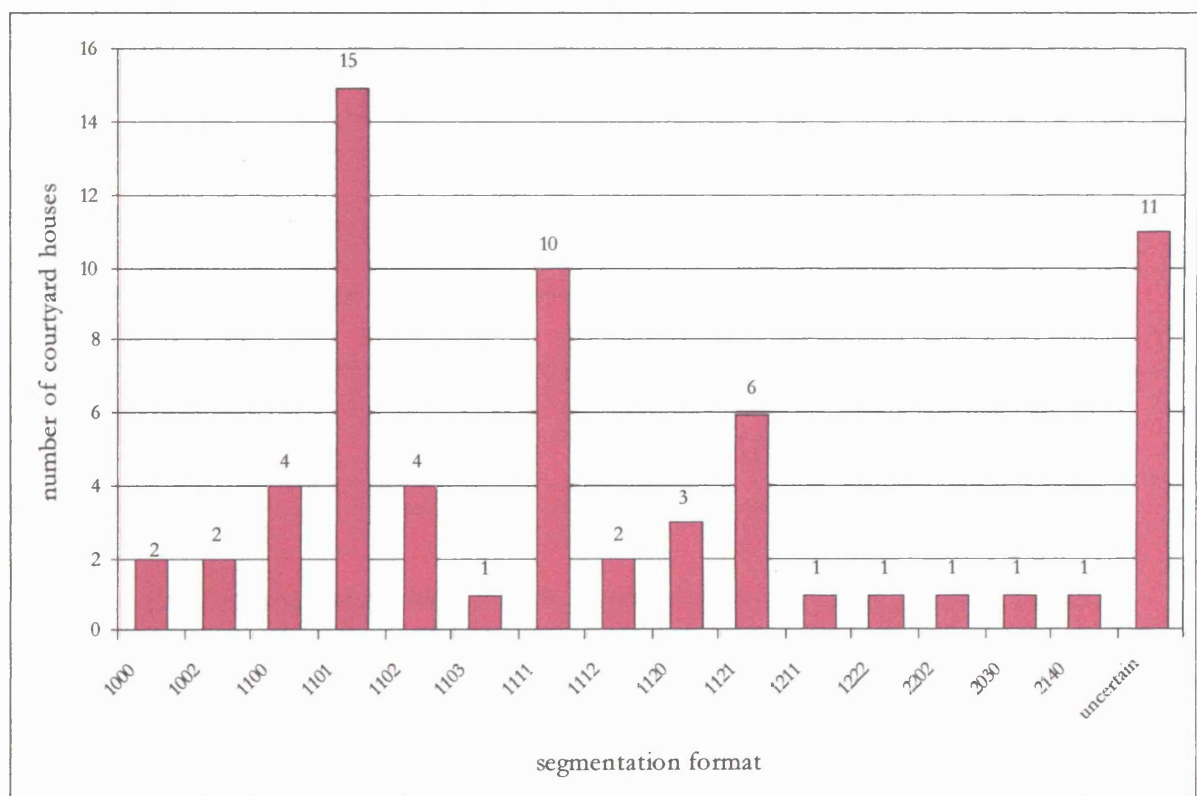


Fig. 5.1 Segmentation formats of discernable courtyard houses in West Penwith (n=65).

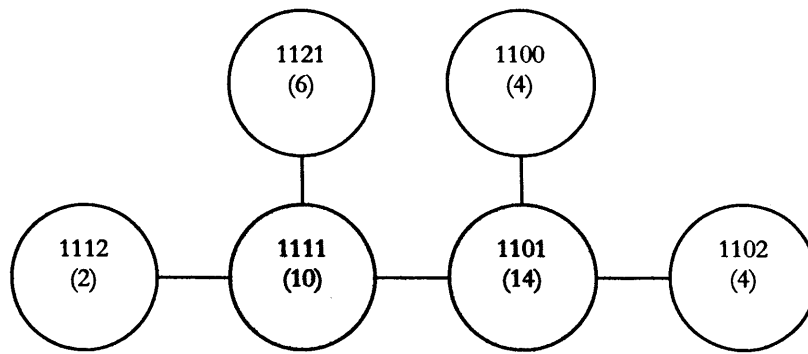


Fig. 5.2 Most common variations in segmentation format from dominants 1111 and 1101.

Frequency within a single segmentation format	Courtyard	Round Room	Circular/Oval Room	Long Room
0	0	5	29	11
1	51	46	13	32
2	3	3	10	10
3	0	0	1	1
4	0	0	1	0
Total	54	54	54	54
+ 11 cases of 'uncertain' formats				

Fig. 5.3 Frequency with which specific numbers of each room type appear within a single segmentation format.

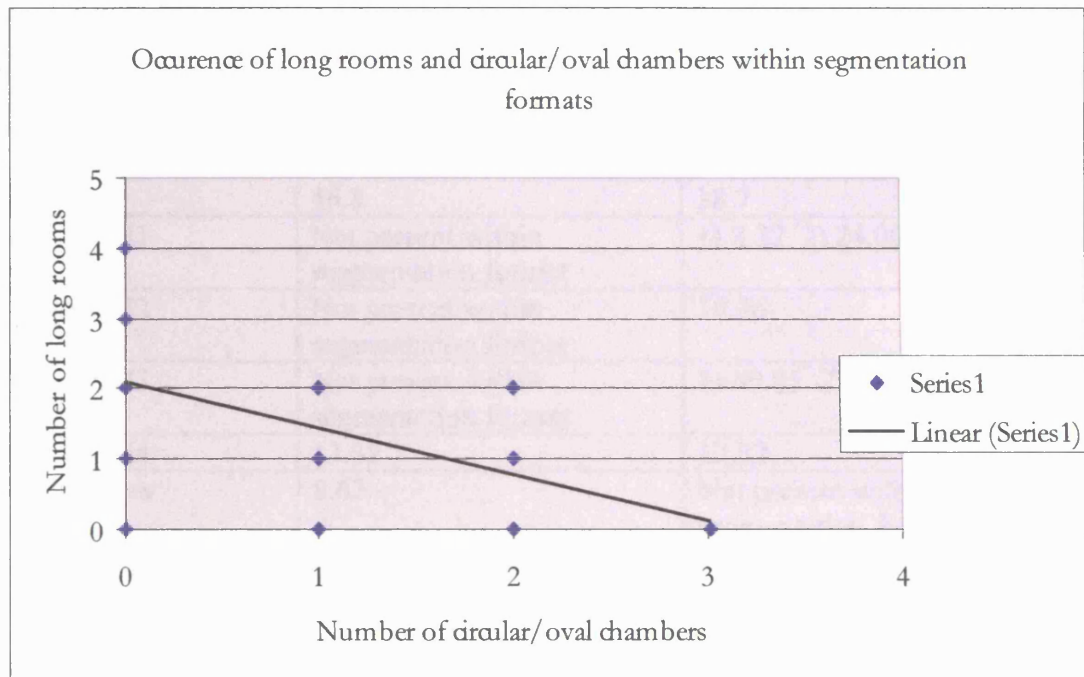


Fig. 5.4 Graph displaying the negative correlation between long rooms and circular/oval chambers in instances where the number of long rooms ≥ 3 .

Site	Internal area (m ²) of circular/oval chamber	Internal area (m ²) of long room
Bosigran CH1	7.07	12.76
Bosigran CH2	1) 28.26 2) 11.34	8.34
Bosigran CH East	24.62	12.82
Bosiliack CH1	14.08	28.8
Bosporthenis CH1	Not present within segmentation format	18.7
Carne CH1	46.8	38.7
Croftoe CH1	Not present within segmentation format	1) 8.32 2) 24.00
Croftoe CH2	Not present within segmentation format	10.26
Croftoe CH3	Not present within segmentation format	1) 40.85 2) 10.56
Croftoe CH4	13.32	12.32
Greenburrow	8.62	Not present within segmentation format

Table 5.5 A comparison of the internal areas of circular/oval chambers and long rooms.

	Carn Euny	Chysauster	Porthmeor	Goldherring	Mulfra Vean (no data)
Courtyard					
Round Room		4 possibly 5	4	2	
Long Room	possibly 2		2 (later Roman levels)	1 (later Roman levels)	
Small Circular/Oval Side Chamber		1 possibly 2		1 grain parching oven (later Roman levels)	
Attached Structure		1			

Table. 5.6 location and frequency of hearths at excavated courtyard house sites

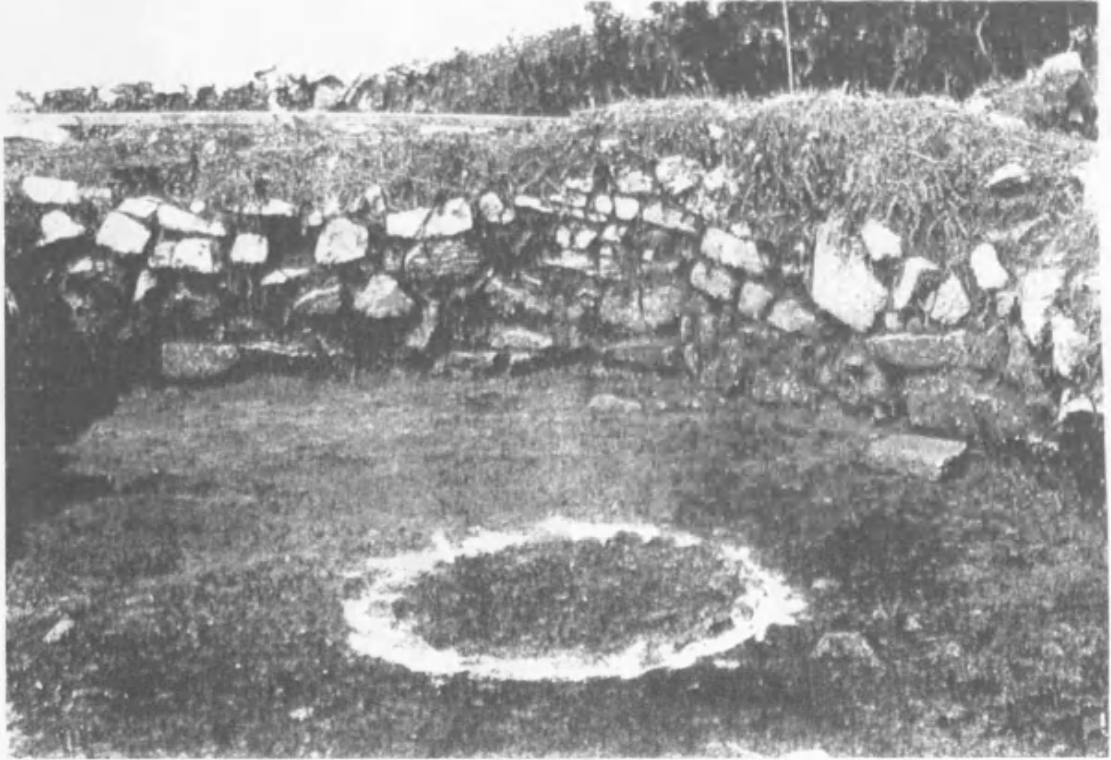


Fig. 5.7 Hearth in the Long Room of Courtyard house 1 at Porthmeor (after Hirst 1937, no page number or plate number).



Fig. 5.8 Rectilinear structure at Goldherring used for melting tin-ore (c. 3rd-4th centuries AD) (after Guthrie 1969: 12).

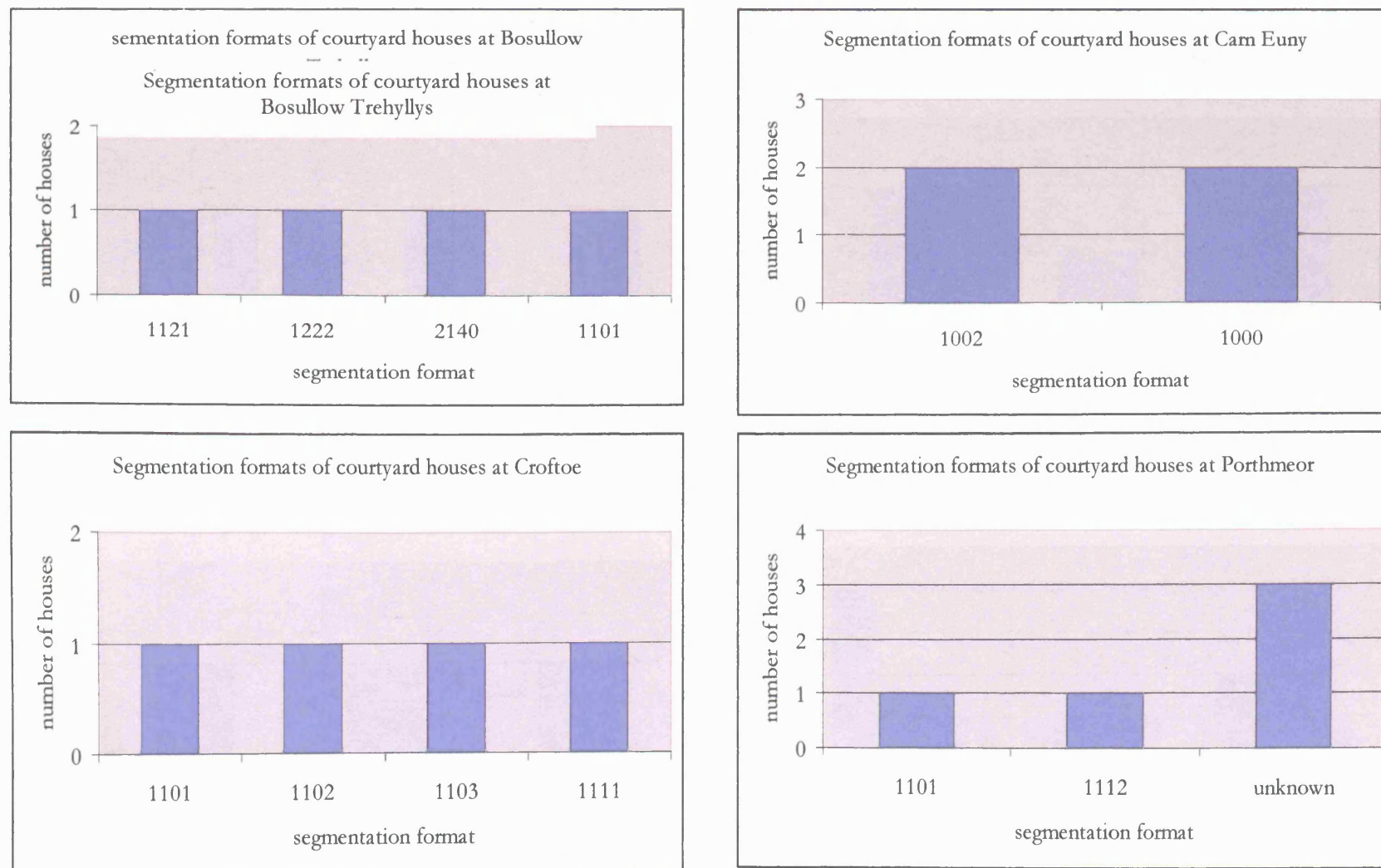


Fig. 5.3.1 Segmentation formats present at sites with multiple courtyard house structures

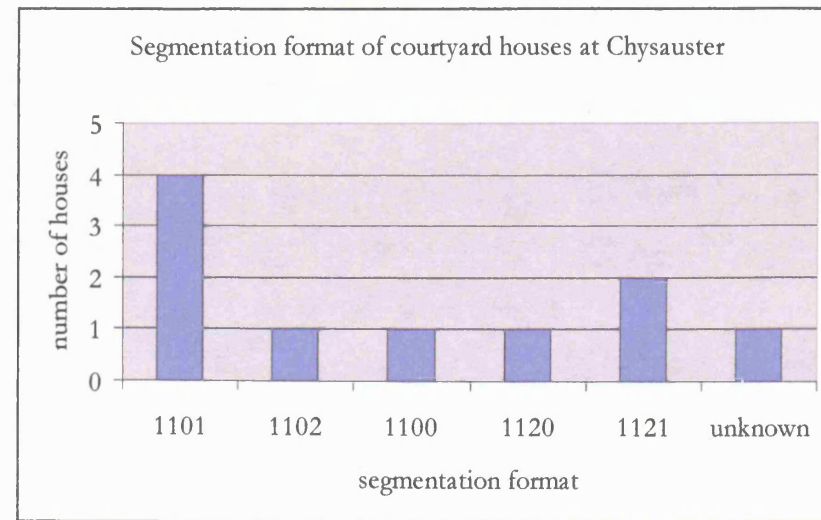
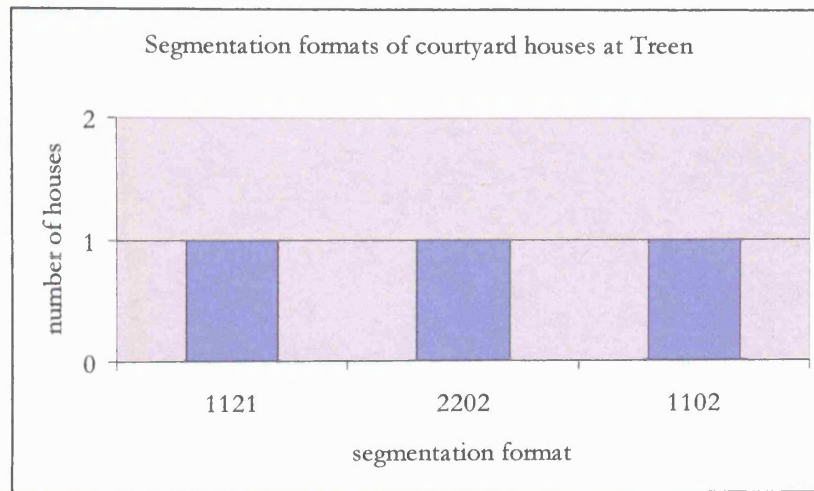
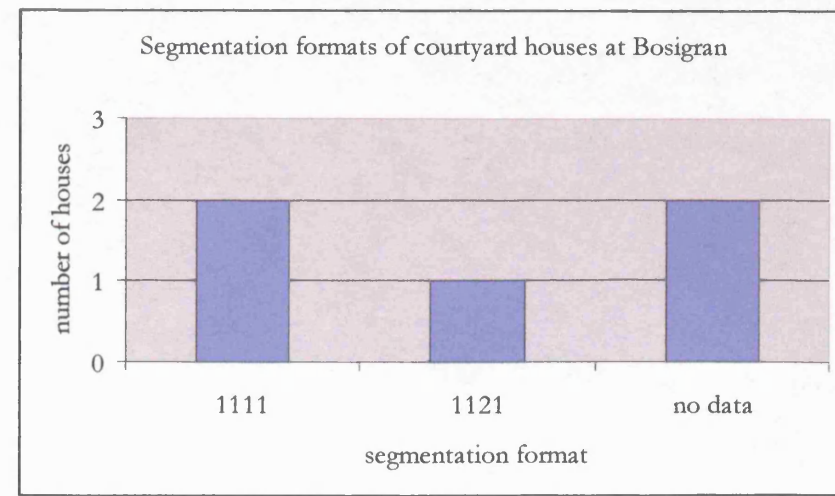
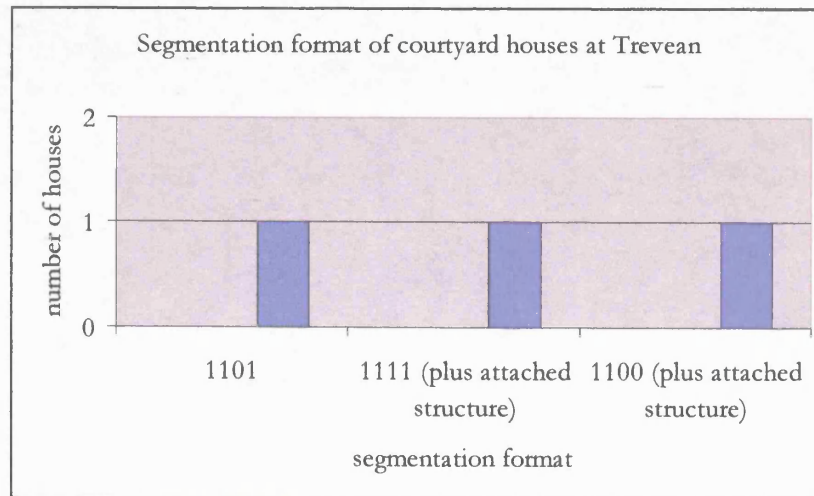


Fig. 5.3.1 Segmentation formats present at sites with multiple courtyard house structures (cont.)

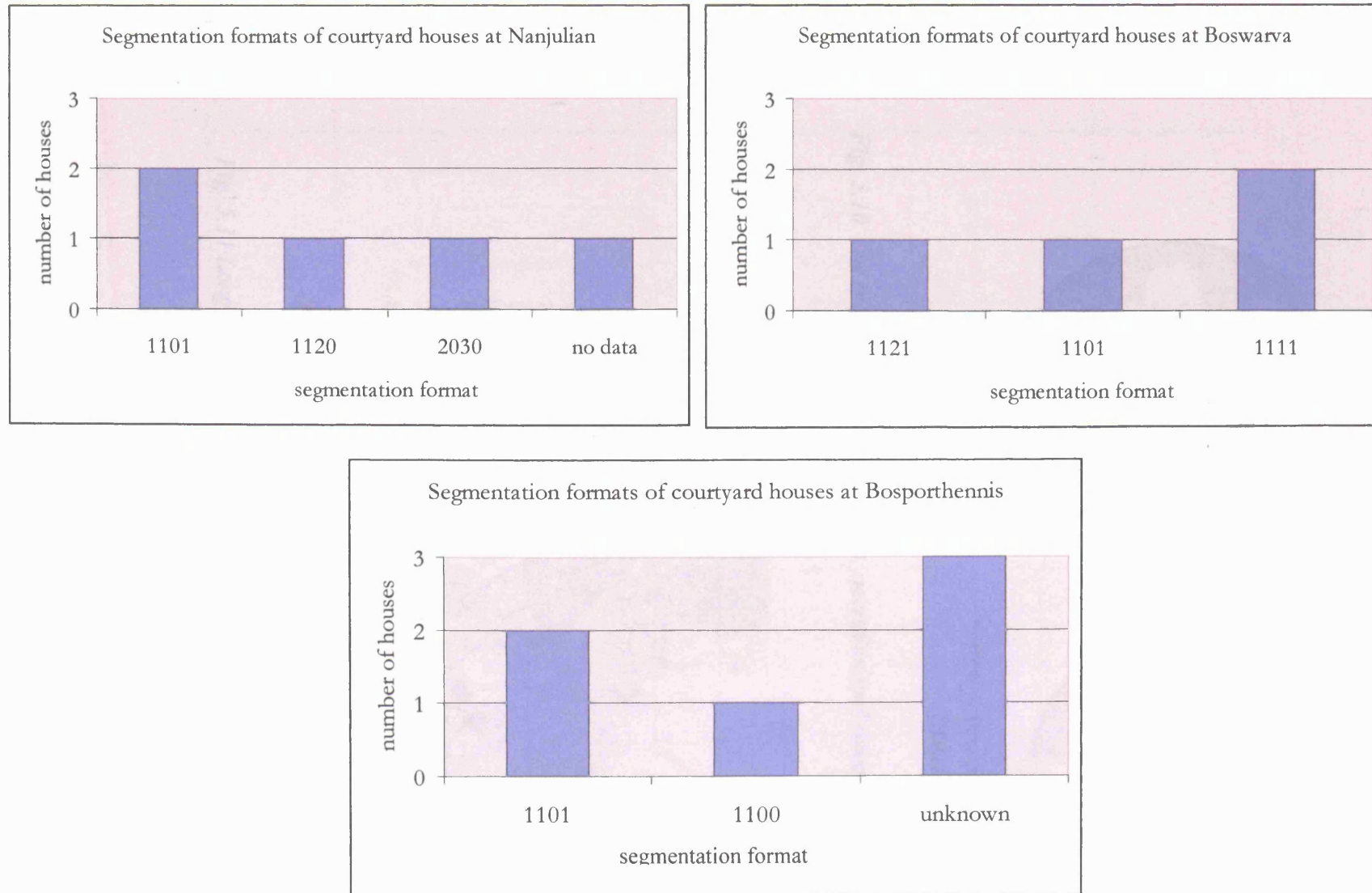


Fig. 5.3.1 Segmentation formats present at sites with multiple courtyard house structures (cont.)

a) Accretion

b) Courtyardisation

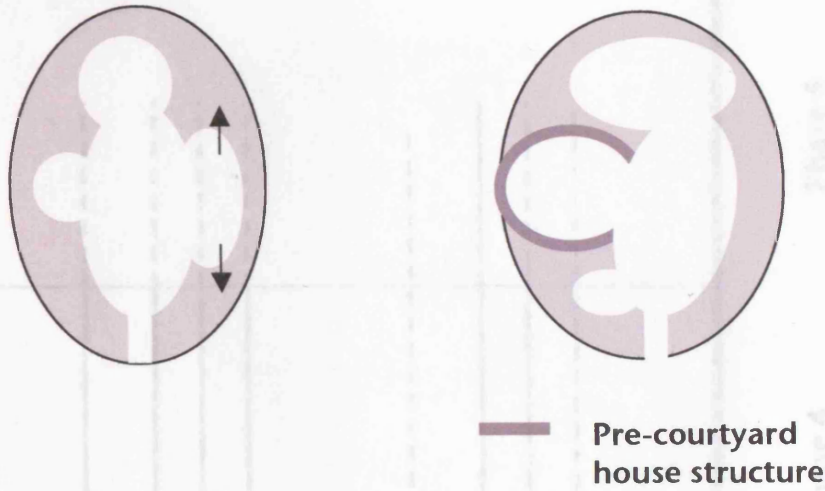


Fig. 5.10 The creation of ancillary rooms: accretion and courtyardisation processes.

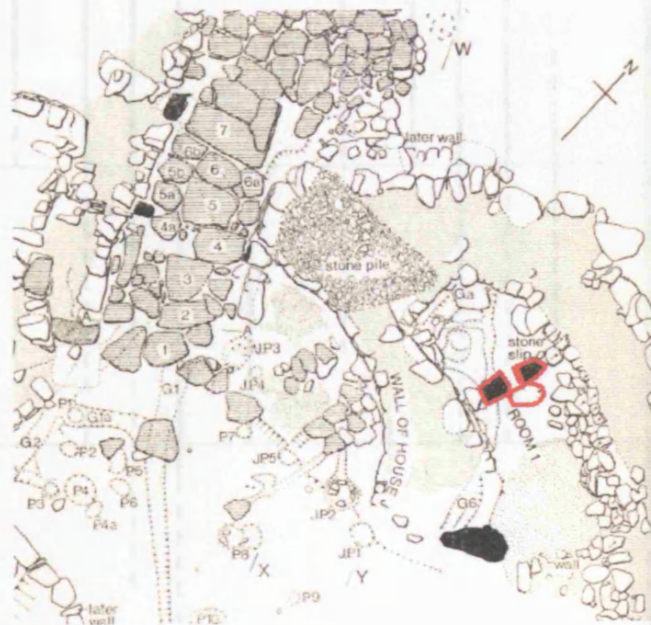


Fig. 5.11 Long room 1 of Courtyard House 1 at Carn Euny, showing subdivision (outlined in red).

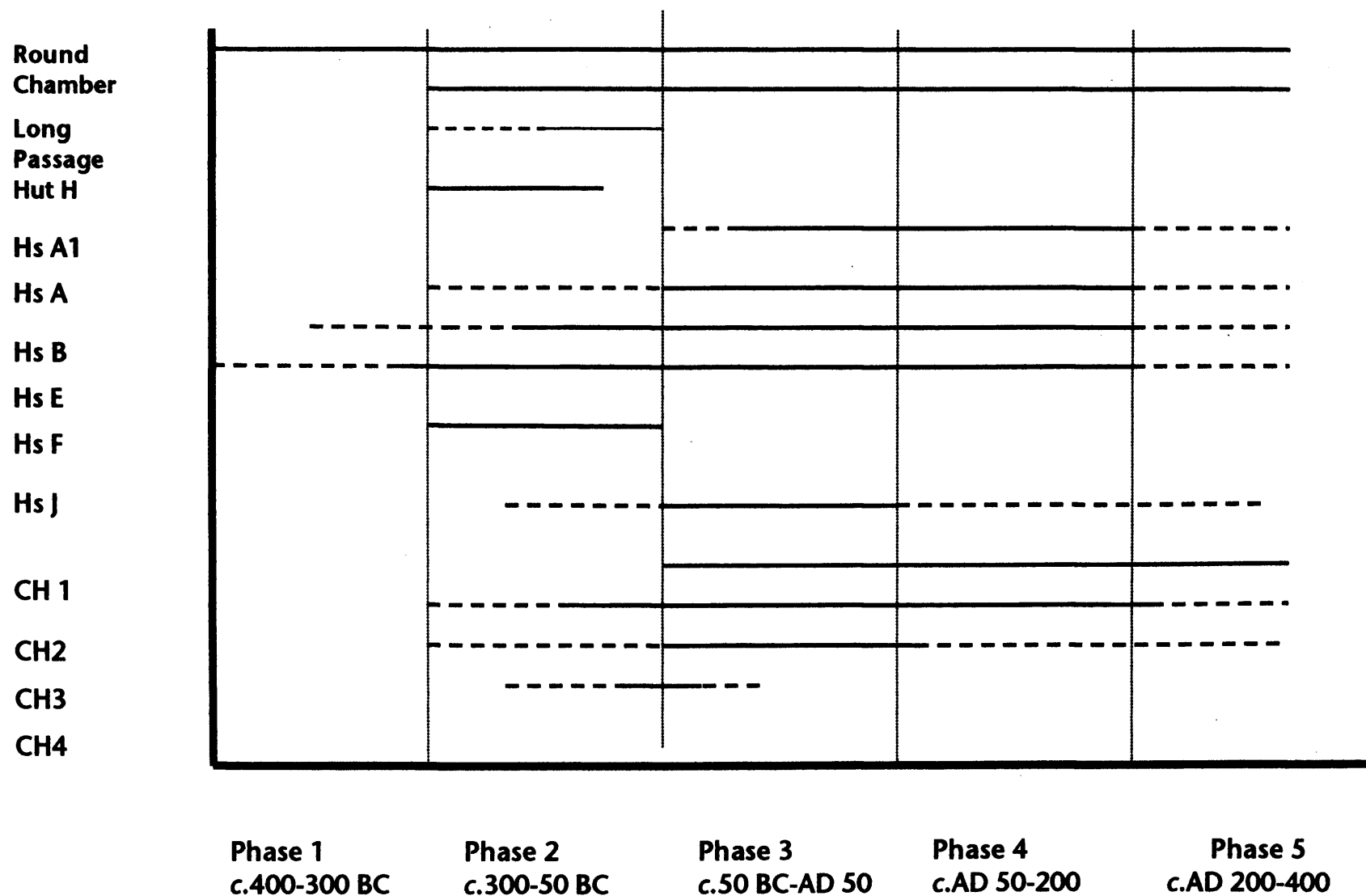


Fig. 5.12 Carn Euny: main structural phases of occupation.



Fig. 5.13 The lynchet running through Bosulow Trehyllys that produced Iron Age pottery in excavation.



Fig. 5.14 Subdivided spaces; the long room and oval room of CH1(i) at Chysauster.



Fig. 5.15 Courtyard house CH1(i), Chysauster (after Cunliffe 2001: 413).



Fig. 5.16 Courtyard house 2, Bosulow Trehylls (after Weatherhill 2000:94).

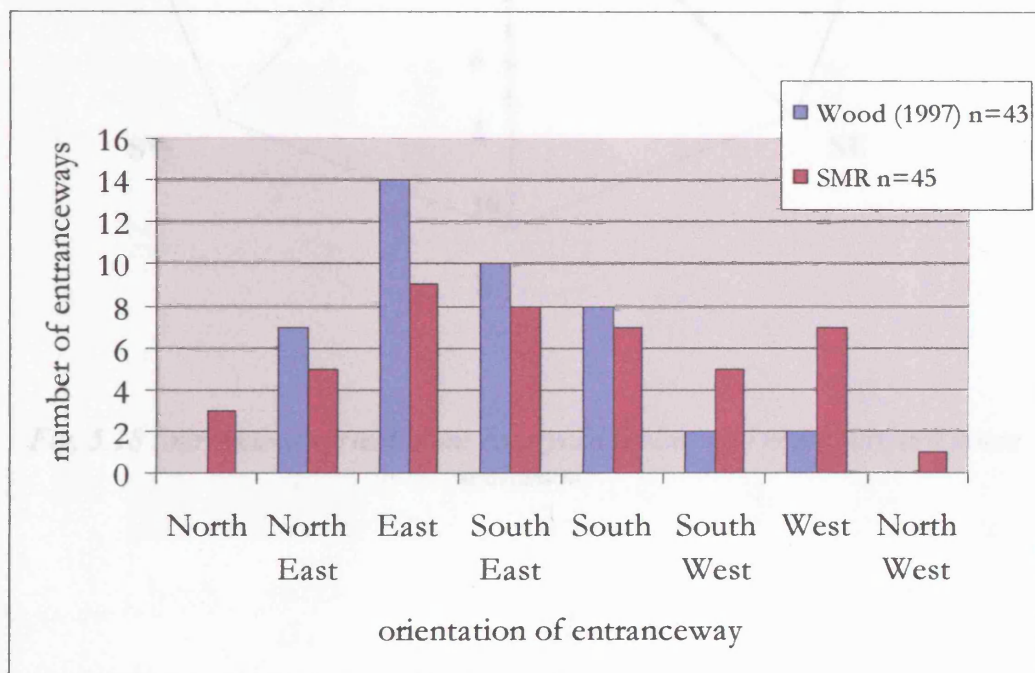


Fig. 5.17 Entranceway orientation of courtyard house structures in Cornwall; after Wood (1997), in blue, and from data gained from the SMR and published records, in red.

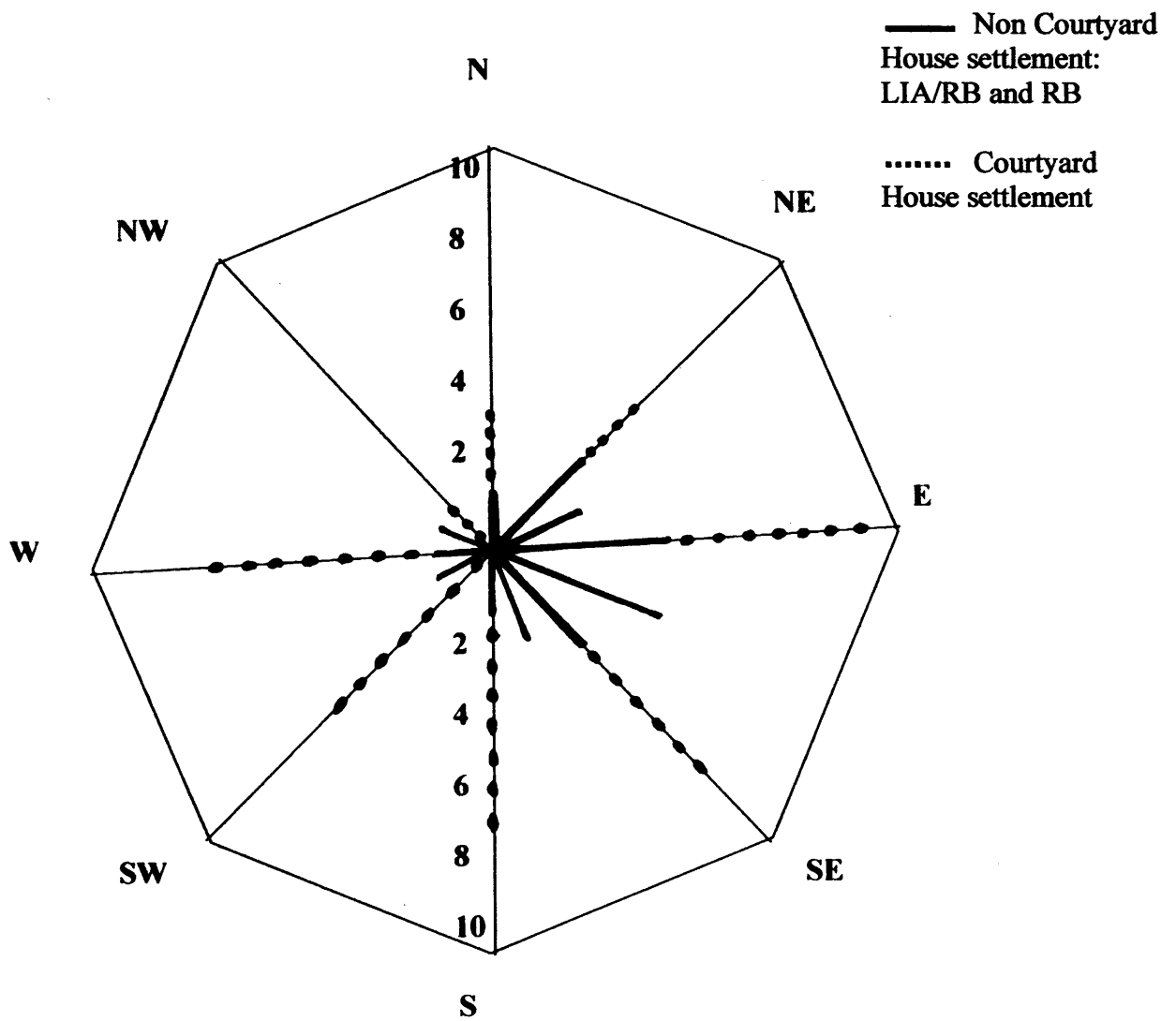


Fig. 5.18 Entranceway orientation: courtyard houses and non-courtyard house settlement.

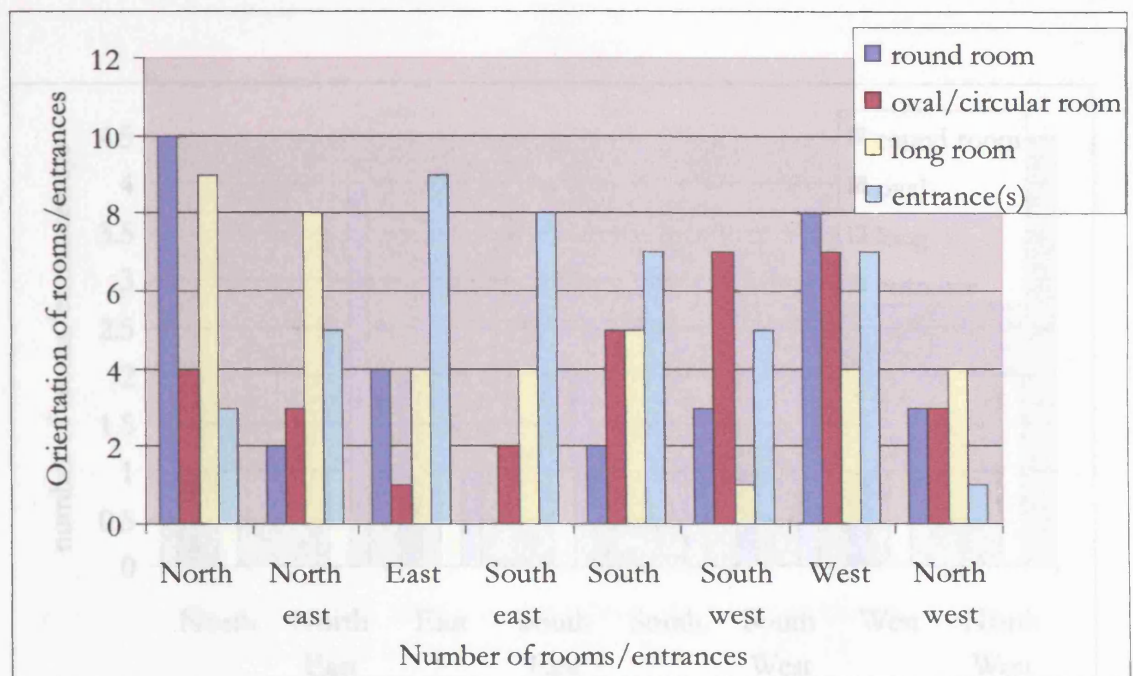


Fig. 5.19 Orientation around the courtyard of rooms and entrance.

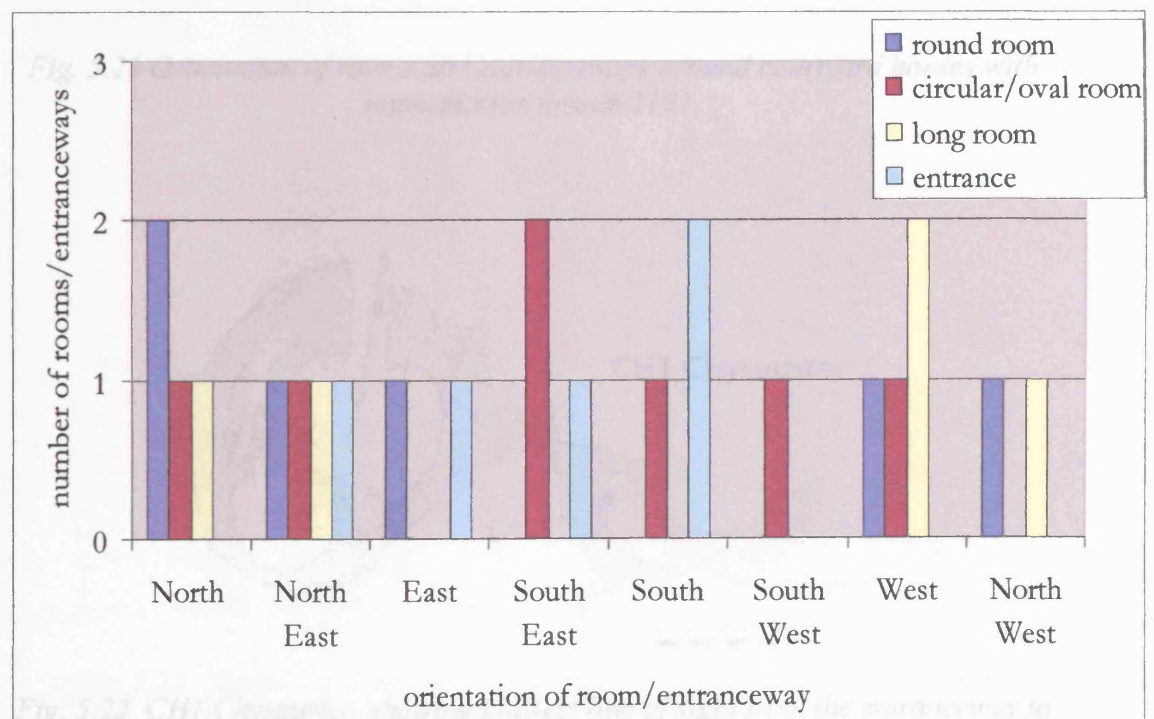


Fig. 5.20 Orientation of rooms and entranceways around courtyard houses with segmentation format 1111.

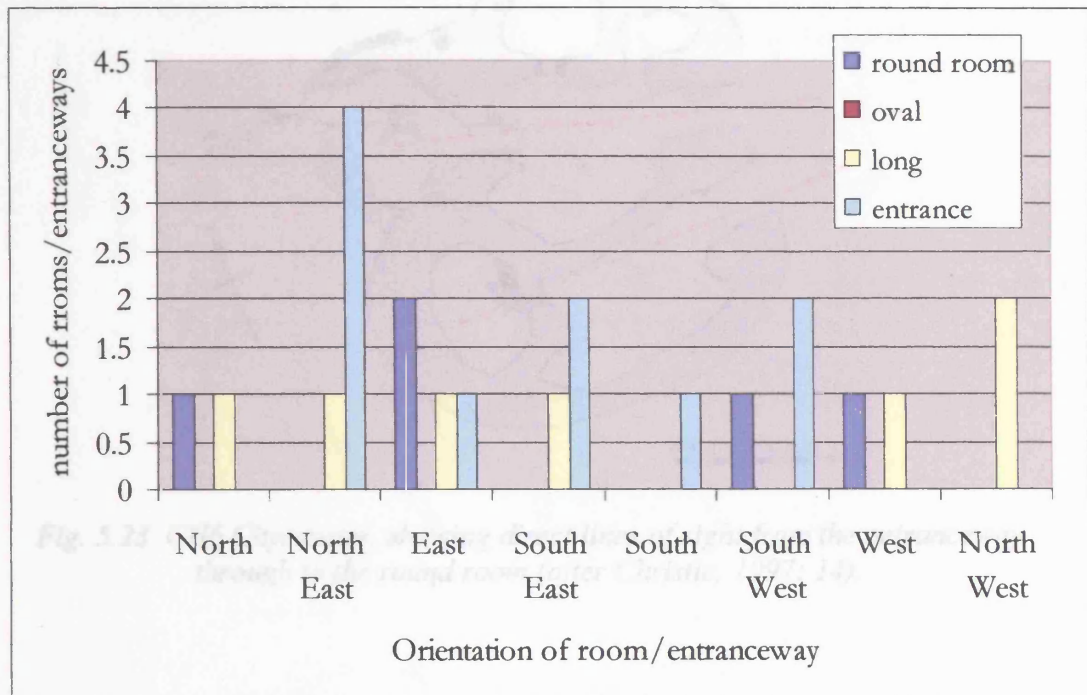


Fig. 5.21 Orientation of rooms and entranceways around courtyard houses with segmentation format 1101.

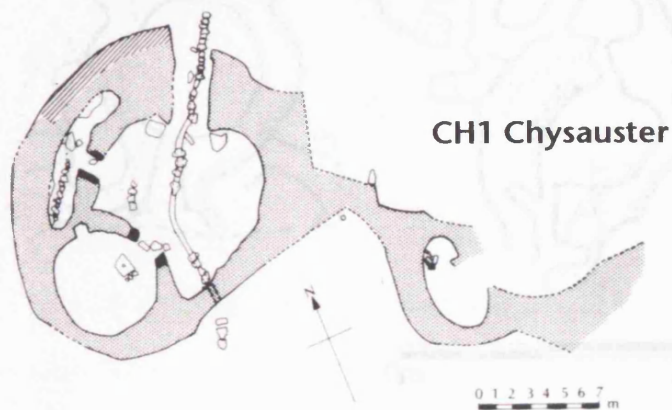


Fig. 5.22 CH1 Chysauster, showing indirect line of sight from the entranceway to the round room, opposite (Christie, 1997: 13).

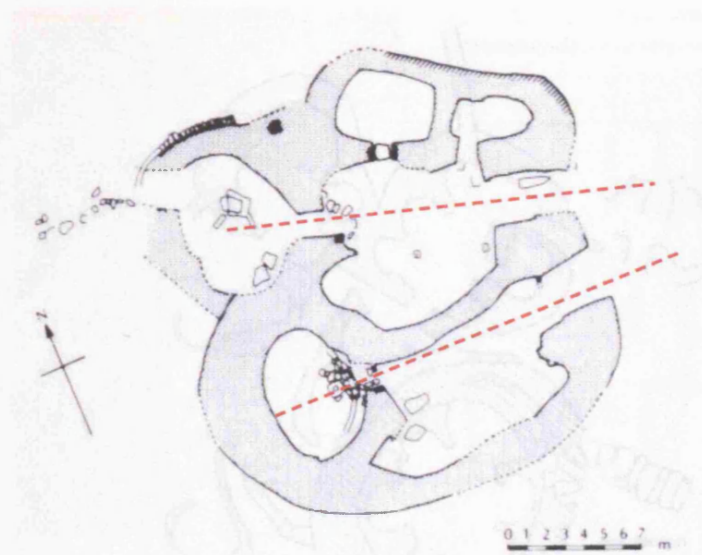


Fig. 5.23 CH6 Chysauster, showing direct lines of sight from the entranceway through to the round room (after Christie, 1997: 14).

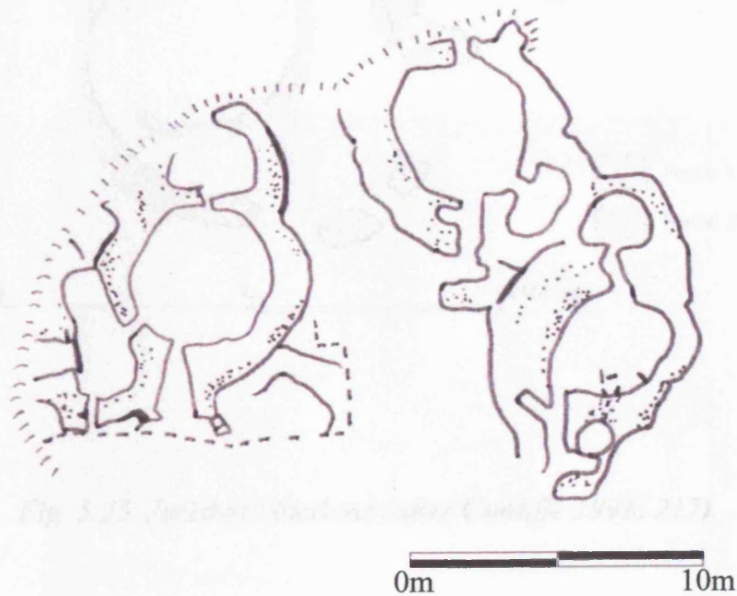


Fig. 5.24 'figure.-of-eight' house at Bosta, Great Bernera (redrawn from Neighbour and Crawford 2001: 295).

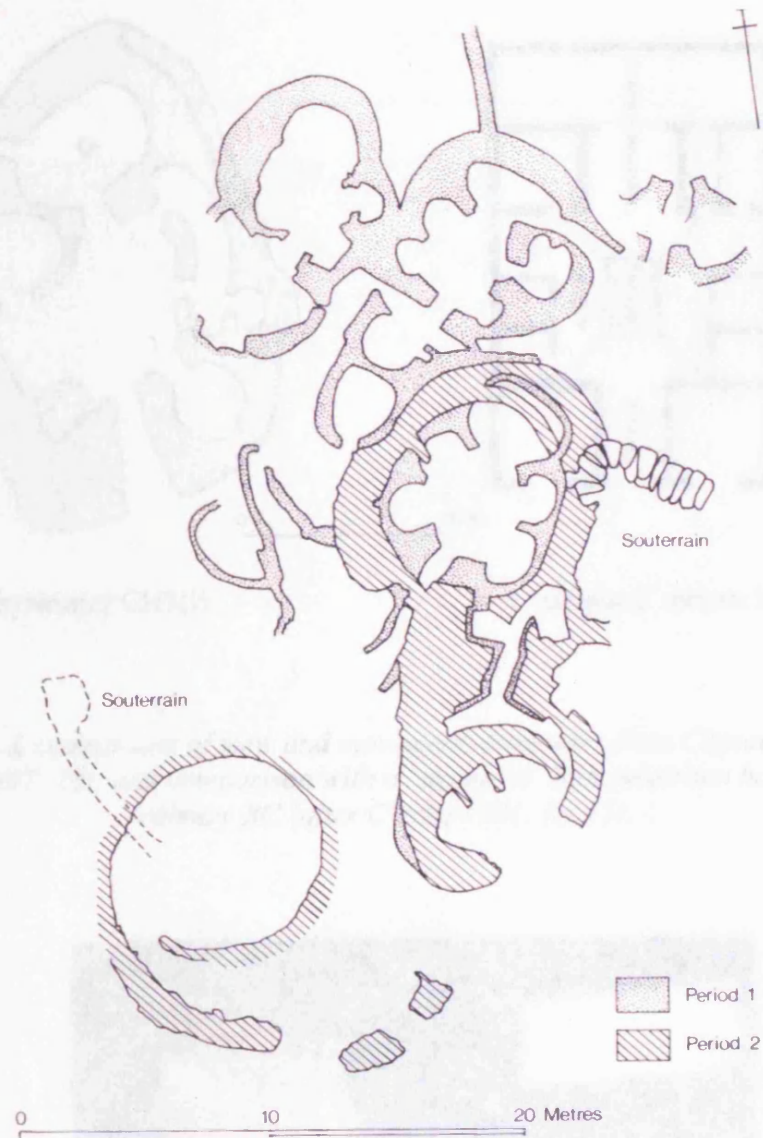


Fig. 5.25 Jarlshof, Shetland (after Cunliffe 1991: 217).

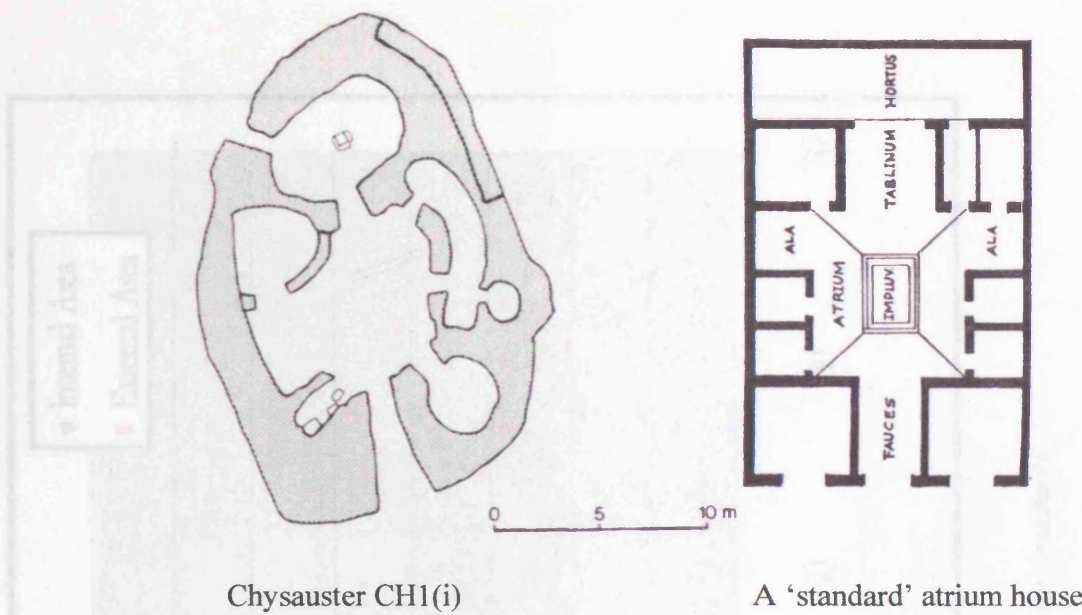


Fig. 5.26 A central axis of view and movement. Examples from Chysauster (after Christie 1997: 18), and comparison with a 'standard' Roman atrium house c. third century BC (after Clarke 1991: fig.15).



Fig. 5.27. House of Paquius Proculus, Pompeii. View along the central axis - from the entranceway, across the impluvium to the tablinum (Bonechi no date:68).

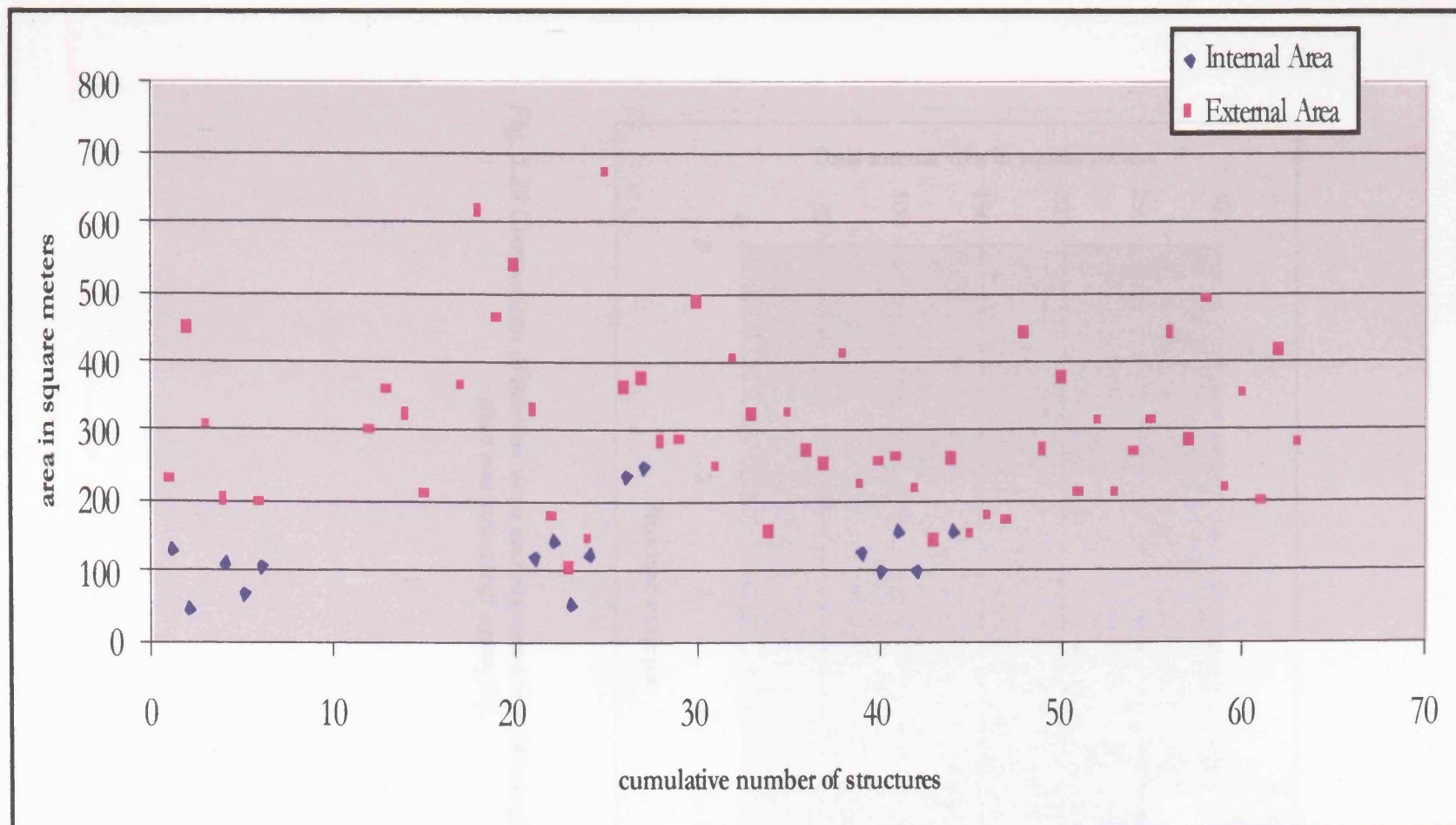


Fig. 5.28 Comparison of internal and external areas of courtyard house structures.

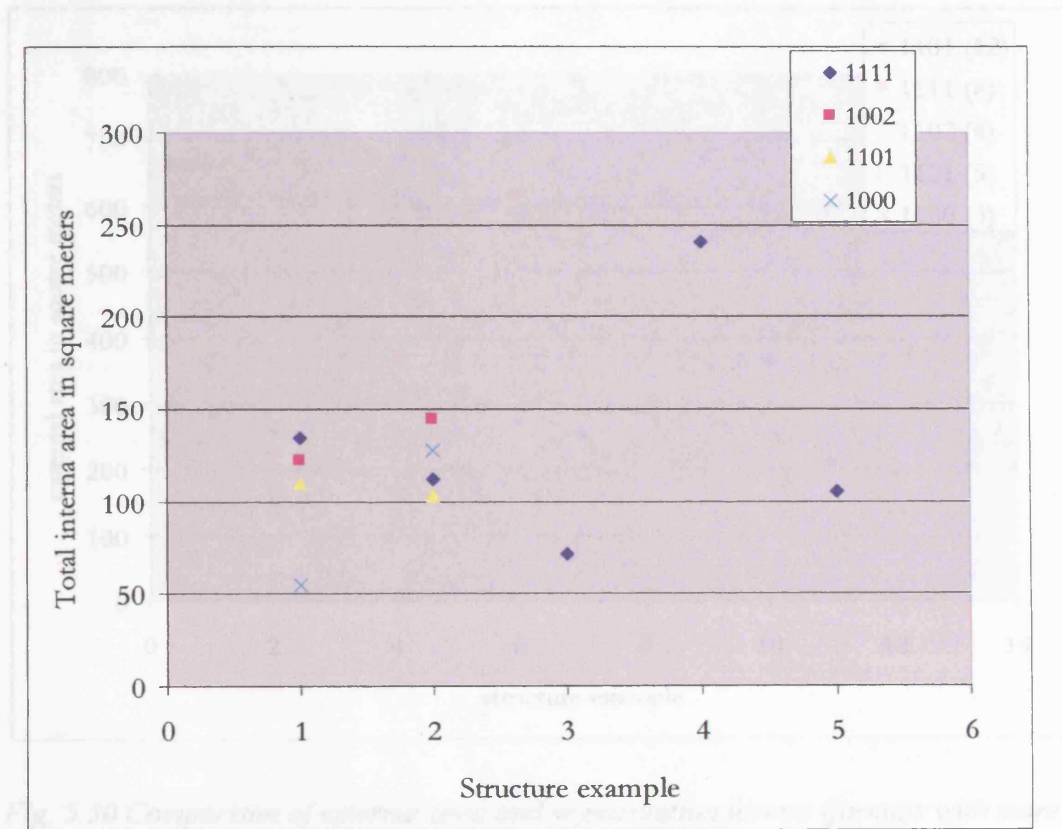


Fig. 5.29 Comparison of internal area and segmentation format (formats with more than one structural example).

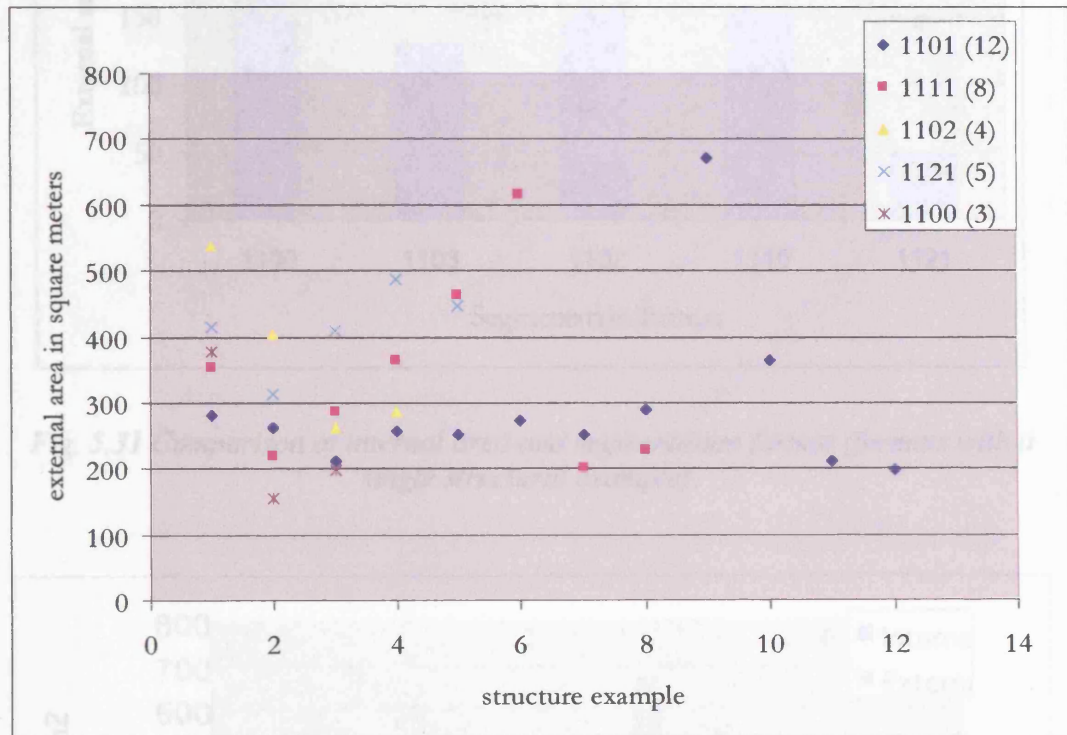


Fig. 5.30 Comparison of external area and segmentation format (formats with more than one structural example).

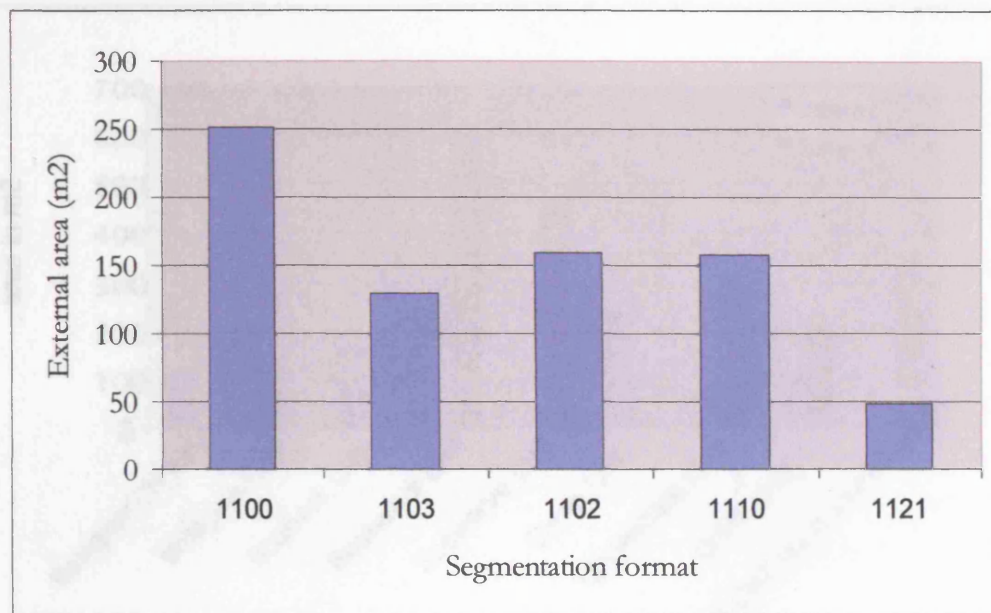


Fig. 5.31 Comparison of internal area and segmentation format (formats with a single structural example).

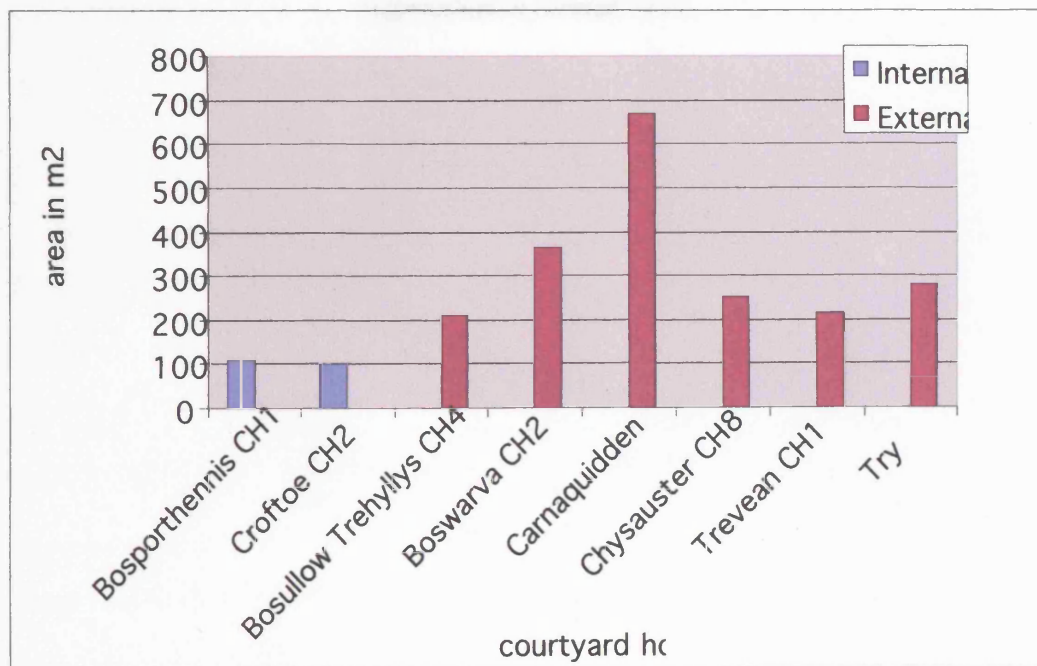


Fig. 5.32. Enclosed areas (internal and external) of courtyard houses with segmentation format 1101.

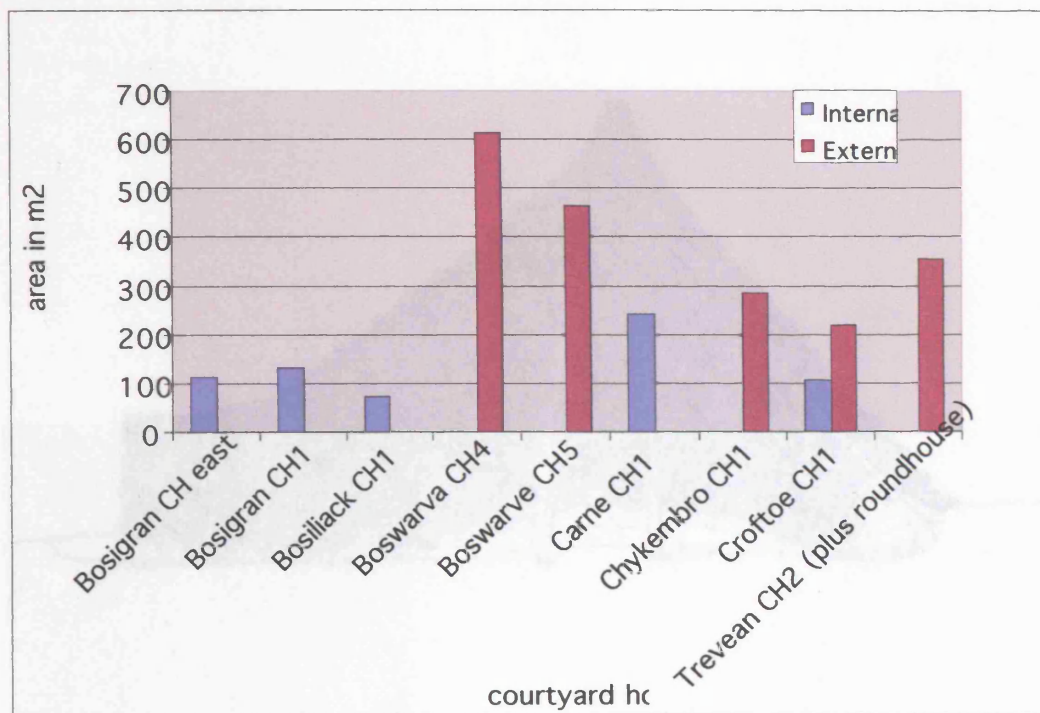


Fig. 5.33 Enclosed area (internal and external) for courtyard houses with segmentation format 1111.

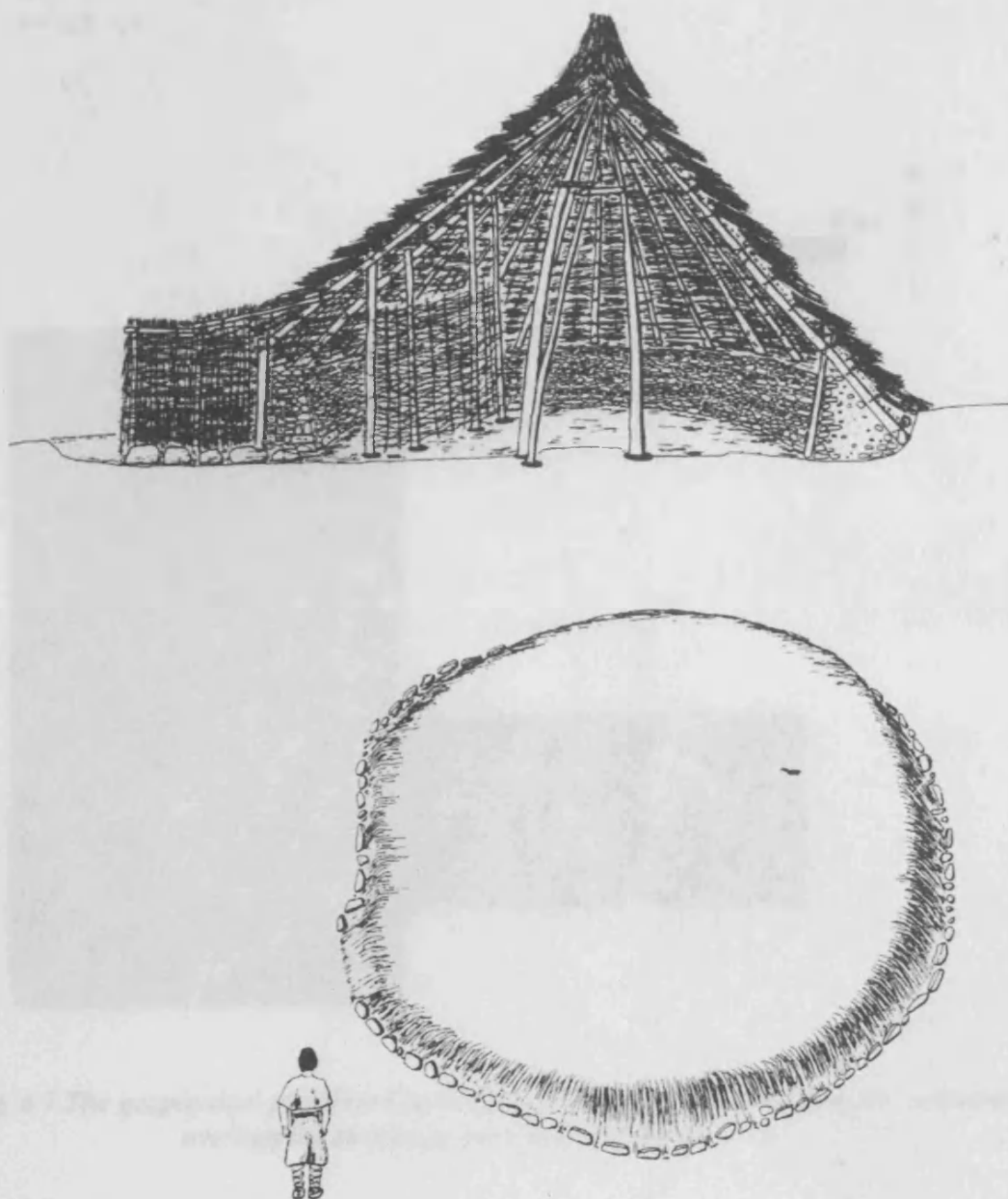


Fig. 6.0 Cross section of the structure at Callestick, and of its final form after abandonment (after Jones 1998-9: 51).

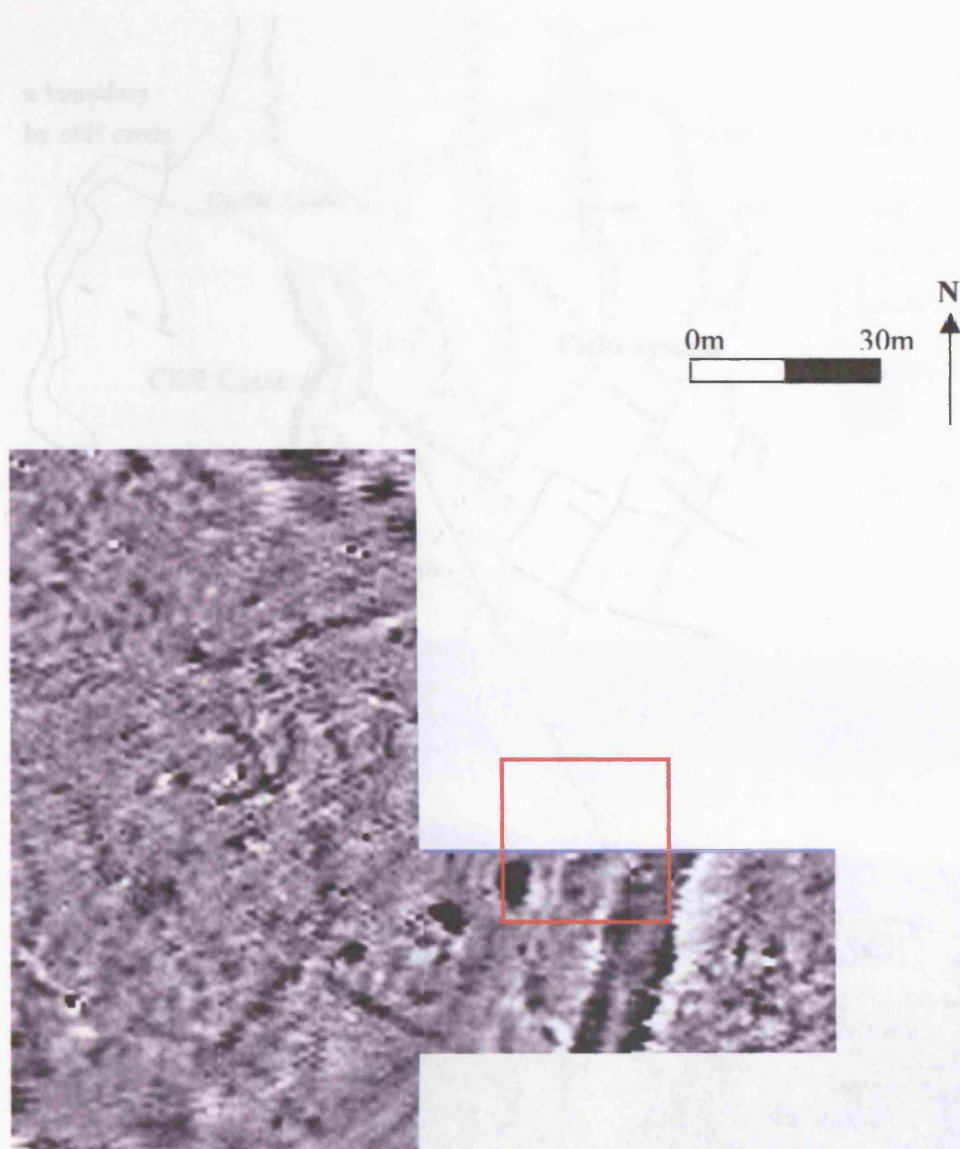


Fig. 6.1 The geophysical plot from Castle Gotha. In the plot on the right, the potential overlapping structures have been identified in red.

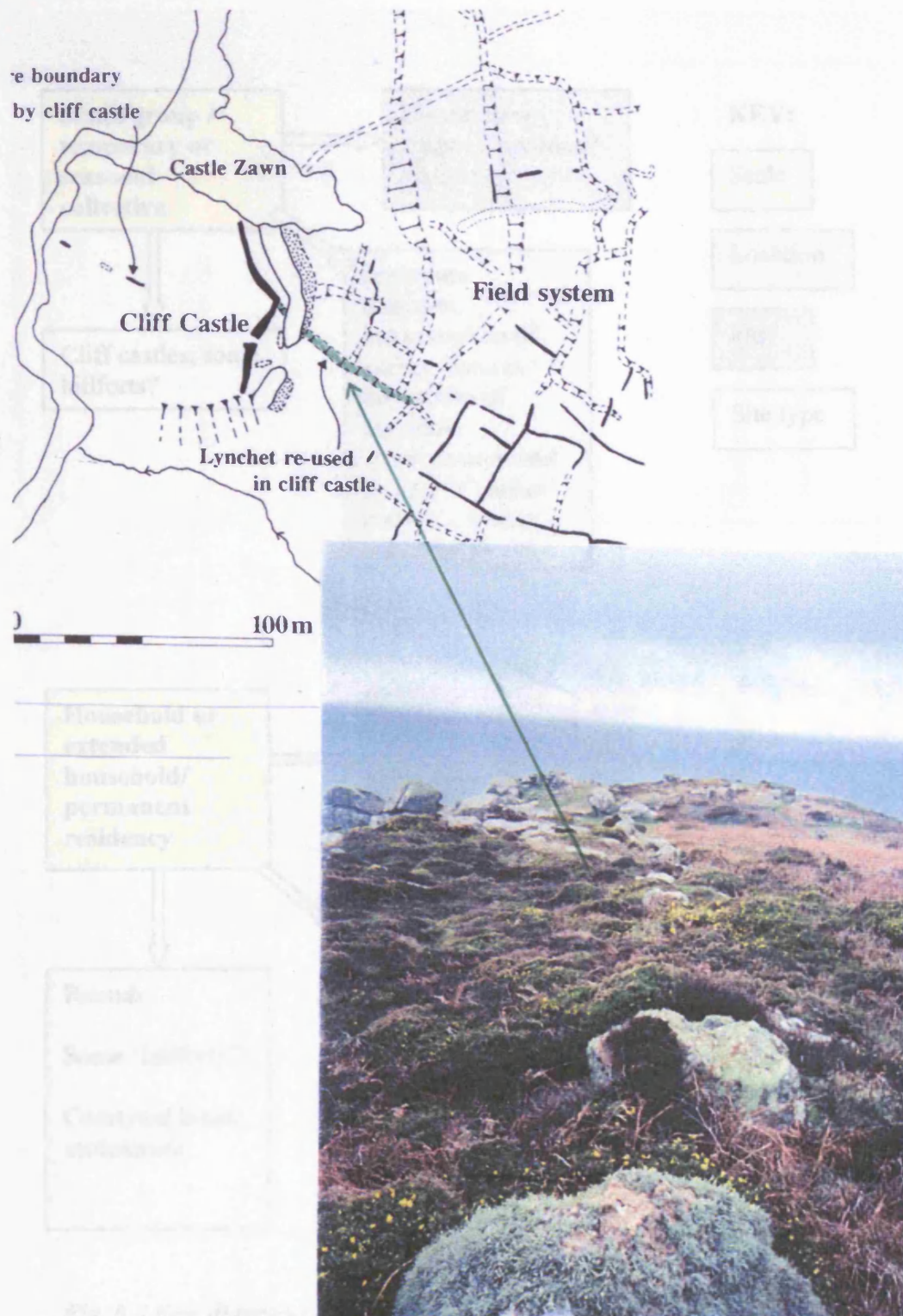


Fig. 6.2 BA lynchet, re-used within the rampart of Maen Castle cliff castle.

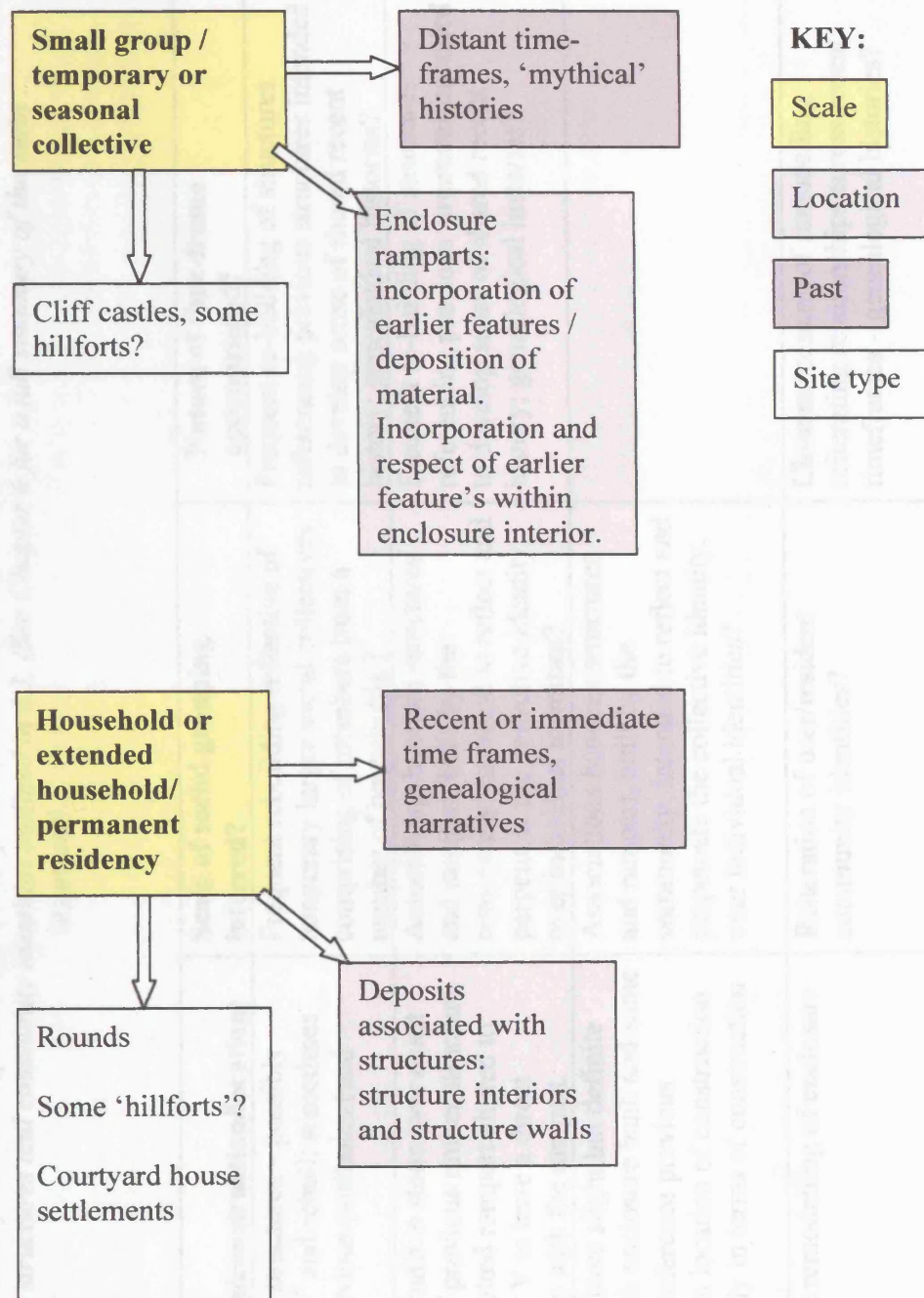


Fig. 6.3 flow diagrams highlighting the relationships between the scale of social group, location of action associating with the past, and type of past being associated with.

6.4 Table summarising some of the key relationships between time, space and material culture, discussed within the thesis and used to support the model of social structures and community identities outlined in 6.3. (See Chapter 6 for a full summary of the main argument).

Site	Evidence (deposition/construction/location)	Scale of social grouping inferred?	Nature of time-frame appropriated?
St Mawgan-in-Pyder	Stake built structures – possibly ‘temporary’ and rebuilt sometimes reusing previous postholes (and posts?)	Frequent rebuilding reflective of temporary larger social collectives comprising of members from a number of households.?	Frequent re-building of structures referencing previous structures intended to develop sense of shared recent history; genealogical histories?
St Mawgan-in-Pyder	Hut V – rebuilt in stone over exact footings of previous timber structure. Newly revetted rampart altered to enable Hut V to have a direct relationship with the rampart.	Associations between structures and rampart, built by the community, intended to reflect and perpetuate the collective identity, over individual identities?	Frequent re-building of structures referencing previous structures intended to develop sense of shared recent history; genealogical histories?
St Mawgan-in-Pyder Threemilestone Castle Gotha Trethurgy Porthmeor	Structures have slight but definite contact with enclosure bank and some structures reference previous buildings in location of construction and possibly in terms of construction materials.	Associations between structures and rampart, built by the community, intended to reflect and perpetuate the collective identity, over individual identities?	
Castle Dore St Mawgan-in-Pyder Grambla Trethurgy	Successive remodelling of enclosure banks.	Reiteration of user/resident community identities?	Close succession of remodelling reiterating relationships across recent timeframes – genealogical histories?

Killibury Castle Gotha	Pit beneath enclosure rampart containing lugged sherd of BA pottery.	Reiteration of resident community identity at enclosure bank – which defines the community, drawing upon material associated with the distant past?	Drawing upon distant, mythical histories in association with the enclosure bank, containing the community?
Castle Gotha	Structures built in successive phases and overlapping one and other. Drainage gullies within the interior of these structures containing bronze brooches.	Household identities reiterated through successive building, referencing previous structures in location and perhaps materials? Similar acts of deposition using similar material culture used to reference previous acts within a recent timeframe?	Referencing of previous constructions and previous acts of deposition within recent timeframes – reiterating notions of genealogical histories?
Maen Castle	Cliff castle re-using an earlier BA lynchet in the creation of the enclosure rampart.	Emphasis of feature associated with the distant past and occupation of the headland in association with the enclosure boundary which defines and is maintained by the user/resident community?	Mythical histories in relation to community identity?
Chun Castle	Hillfort with entrance orientated toward BA quoit, less than 100m away.	Association of enclosure with earlier BA landscape feature: relating identity of enclosed community with more distant past?	Mythical histories in relation to community identity?
Castle-an-Dinas Trevelgue Head	Hillfort and cliff castle containing BA barrows within their interior.		Barrows enabled the perpetuation of mythical histories and the notion of a 'common descent' for inhabitants?

Castle Dore	Construction of buildings over recently abandoned earthworks of barbican associated with hillfort enclosure.	Placement of structures in association with previous enclosure boundary associating members of the household with the enclosed community?	Genealogical histories being drawn upon in the association of structures with landscape features of the immediate past?
Trethurgy Bodrift Trevelgue The Rumps	Rebuilding of structures over previous foundations.	Reiteration of household position and identity, generation after generation. At the Rumps this rebuilding may reflect a sequence of short term occupations of the site, possibly in relation to transhumant groups?	Genealogical histories perpetuated in the maintenance and rebuilding of structures in the same location?
Porthmeor Carn Euny Castle Gotha Trevisker Bodrift	These sites (rounds, courtyard house communities and an open site, later enclosed) all reused artefacts such as quernstones within their interior structures.	Association of structural walls, which define the household, with material culture from recent past intended to reiterate household identities?	Genealogical histories?
Trevisker Trethurgy Goldherring Castle Gotha Shortlandsend Threemilestone	These sites are all rounds and have a built percentage of c. 20-40 percent.	Higher density of built space within enclosure combined with archaeological assemblage indicates 'typical' resident households in these cases. Comparable to courtyard house communities and in contrast to hillfort and cliff castle examples (below).	

Goldherring Porthmeor	These sites are enclosed courtyard house communities and have a built percentage of c. 20-40 percent.	Higher density of built space within enclosure combined with archaeological assemblage indicates 'typical' resident households in these cases. Comparable to round communities and in contrast to hillfort and cliff castle sites (below).	
Carn Brea Gurnards Head Killibury	Hillfort and cliff castle with low built percentage (below 2 percent). 'Hillfort' with high built percentage (c. 30 percent)	Gurnards Head and Carn Brea are only two examples of a low built percentage and due to problems inherent with calculating built percentage the values for other hillfort and cliff castles are few. The value from the small hillfort of Killibury indicates the problems with categorising 'rounds' from 'hillforts' and the complexity of the settlement record. The model outlined here suggests that in several instances, the low built percentage of some larger hillforts and cliff castles is more indicative of an intermittent or seasonal occupation (in contrast to the rounds and courtyard house communities above). Killibury highlights however, that this model is simplistic and is only intended to highlight a possible 'trend' in the settlement record.	

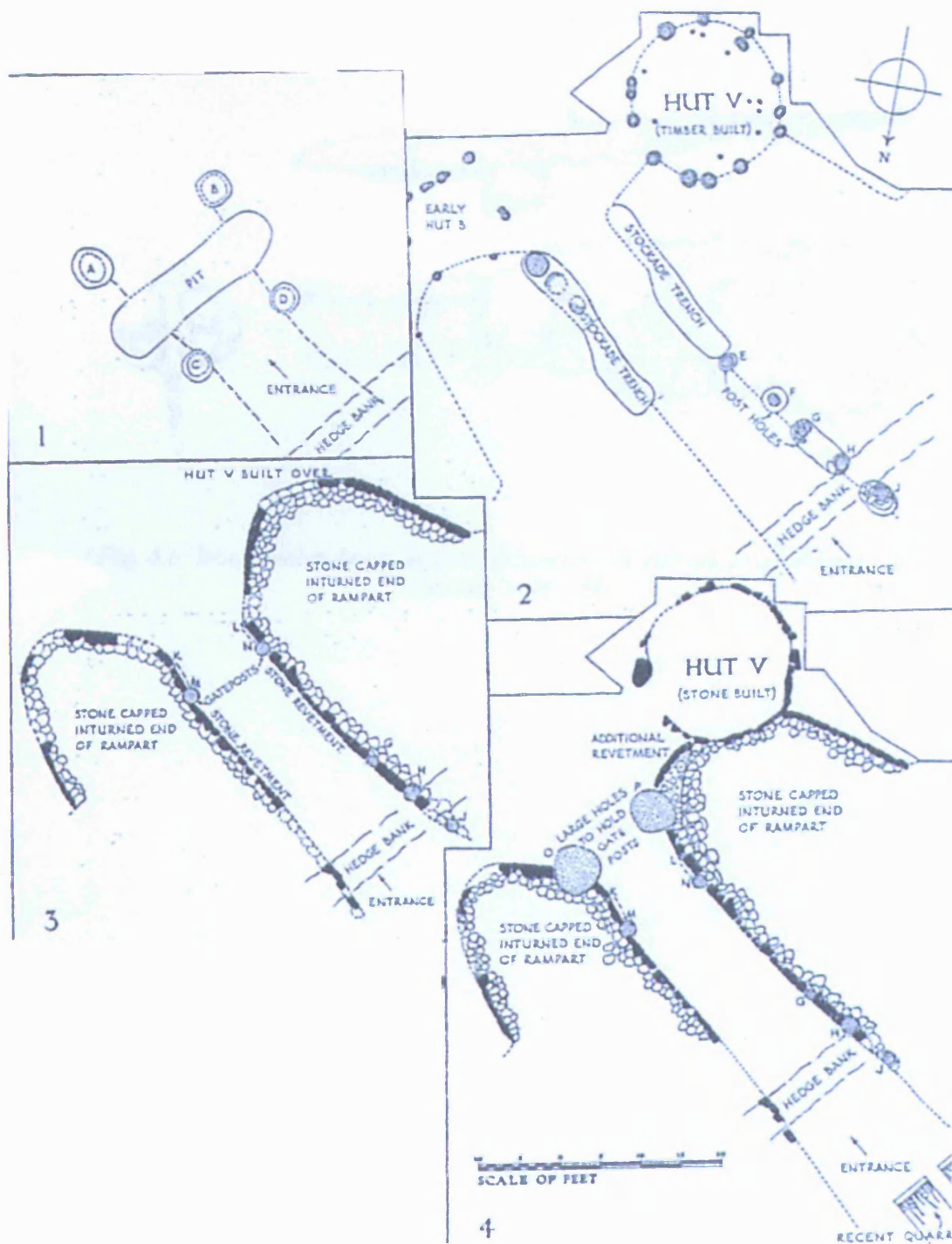


Fig. 6.5 Stages in the construction and re-building of hut V, St Mawgan-in-Pyder (after Threipland 1956: 36).

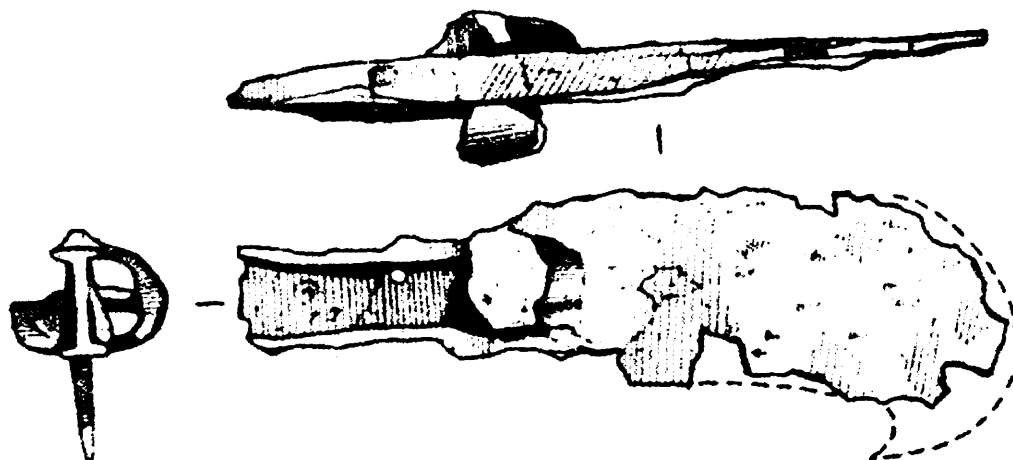


Fig. 6.6 Iron pruning hook, deposited beneath the entranceway of house (after Christie 1978: 394).

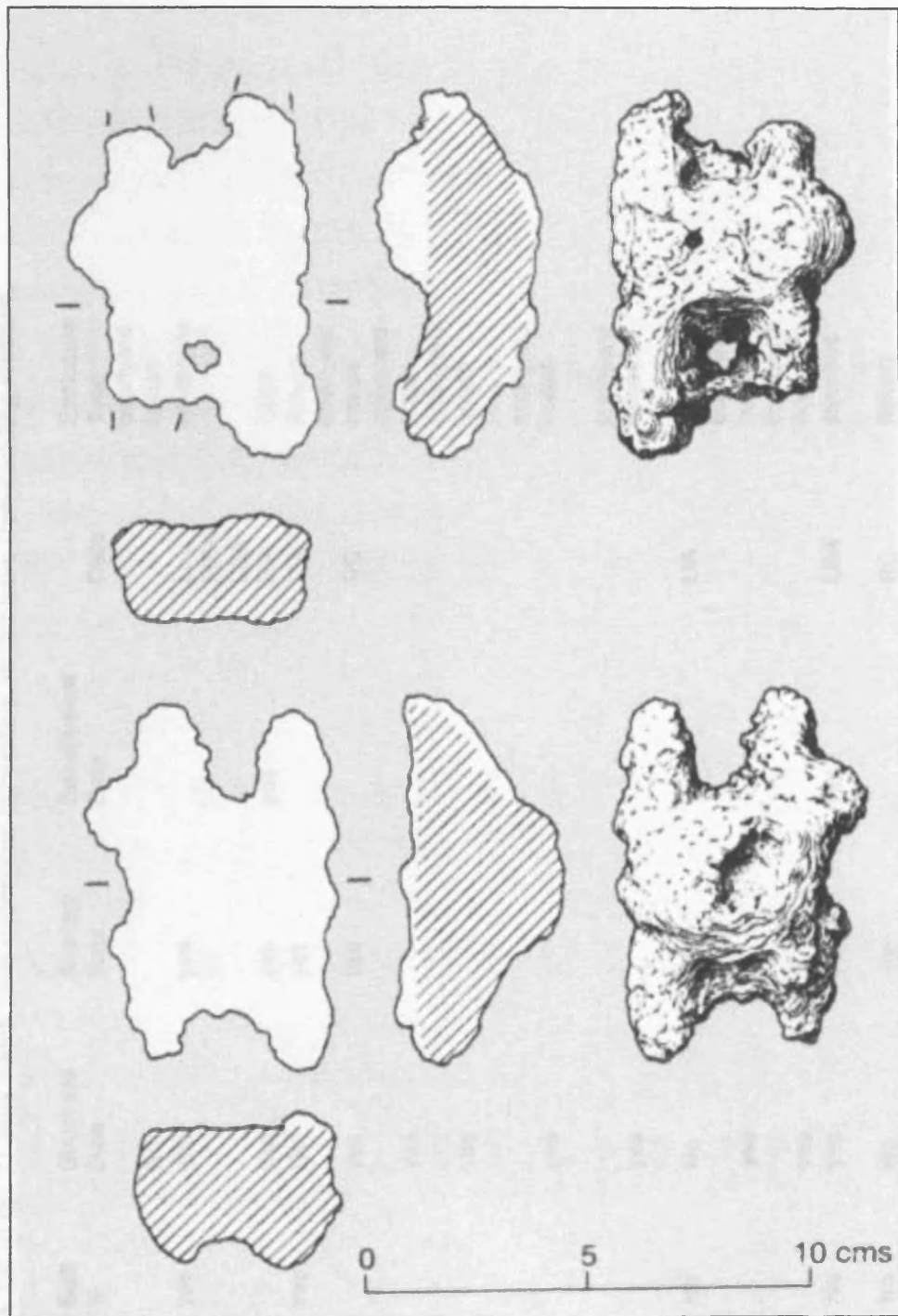


Fig. 7.0 Tin ingots from the shipwreck in Bigbury Bay, south Devon (after Cunliffe 2001: 305).

Appendix 1

A list of the 77 sites which have undergone excavation and/or have free-standing remains.

Site Name	Built %	Structural Data	Artefact Data	Geophysical Data	Date	Enclosure Type
C: Boddinar						courtyard
Crellas		No				house
C: Bodrifty	yes	yes	yes		LIA MBA LBA	enclosure
C: Bodrifty		yes	yes	yes	EIA	Open
C: Bodwen	yes	No	yes		LIA	Round
C:						courtyard
Boscreege		yes	yes		RC	house
						courtyard
C: Bosigran		yes				house
						courtyard
C: Bosiliack		yes				house
C:						
Bosporthen						courtyard
nis		yes				house
C:						
Bossulow						courtyard
Trehyllys		yes				house
C: Bosulow						
Trehyllys	No	No	yes		LIA	field system
C:						courtyard
Boswarva		yes				house
						courtyard
C: Botrea		yes				house
C: Callestick	No	yes	yes	yes	LBA	structure
C:						
Carlidnack	No	No	yes		RC	Round

C: Carn Brea	yes	yes	yes		N LIA	Hillfort
C: Carn Euny	No	No	yes		EIA LIA	Fogou
C: Carn Euny		yes	yes		LIA RC	courtyard house
C: Carnaquidd en		yes				courtyard house courtyard house
C: Carne		yes				enclosure
C: Carvossa	No	yes	yes	yes	RC	
C: Carwarthen	No	?	yes		LIA RC	Round
C: Castle an Dinas	No	yes	yes	yes	LIA	Hillfort
C: Castle Dore	No	yes	yes		LIA	Hillfort
C: Castle Gotha	yes	yes	yes	yes	LIA RC	Round
C: Chun Castle	?	yes	yes		LIA	Hillfort courtyard house
C: Chycandra		yes				courtyard house
C: Chykembro		yes				courtyard house
C: Chysauster		yes	yes		LIA RC	courtyard house
C: Crane Godrevy	No	No	yes		RC	Round courtyard house
C: Crankan		yes	yes		LIA?	courtyard house
C: Croftoe		yes				house
C: Duckpool	No	yes	yes		RC	Open

C: Foage		yes				courtyard house
C: Goldherring	yes	yes	yes	LIA		Round courtyard house
C: Goldherring	yes	yes	yes	RC		house
C: Grambla	No	yes	yes	RC		enclosure
C: Greenburrow		yes				courtyard house
C: Gurnards Head	yes	yes	yes	EIA LIA		cliff castle Fogou associated with round
C: Halligye	No	No	yes	LIA		
C: Harlyn Bay	No	yes	yes	LIA		structure courtyard house
C: Higher Trevowahan		yes				Round Hillfort
C: Kilhallon	No	No	yes	RC		Round
C: Killibury	yes	yes	yes	LIA		Hillfort
C: Killigrew	No	No	yes	RC		Round
C: Little Quoit Farm	No	No	yes	RC		Round
C: Maen Castle	No	No	yes?	EIA LIA		cliff castle
C: Mether Uny			yes	LIA RC		Round courtyard house
C: Mulfra Vean		yes	yes	LIA RC		house courtyard house
C: Nanjulian		yes				house
C: Nanstallon	No	yes	yes	RC		Roman fort
C: North Bosporthen nis		yes	yes	LIA?		courtyard house

C: Pehnale Point	?	yes	yes	LIA	cliff castle
C: Penhale Round	No	yes	yes	LIA RC	Round courtyard house
C: Porthmeor	yes	yes	yes	RC	
C: Porthmeor	yes	yes	yes	LIA LIA RC	Round Round
C: Reawla	No	yes	yes	RC	Round
C: Shortlandse nd	No	yes	yes	RC LBA EIA LIA MBA EIA LIA	Round Open Enclosures
C: Sperris Croft	No	yes	yes	LIA RC LIA RC	Hillfort field system
C: St Austell distributor road	No	No	yes	LIA	cliff castle
C: St Mawgan in Pyder	yes	yes	yes	LIA RC LIA RC	Round Open courtyard house
C: Stenchoose	No	No	yes	LIA	cliff castle
C: The Rumps	No	yes	yes	LIA	cliff castle
C: Threemilestone	yes	yes	yes	LIA	Round
C: Trebarveth	No	yes	yes	RC	Open courtyard house
C: Treen		yes			
C: Tregilders	No	No	yes	LIA RC	Round Hillfort
C: Trencrom	No	yes	yes	LIA ?	Round
C: Trethurgy	yes	yes	yes	LIA	

					RC	courtyard house courtyard house
C: Treveal		yes				
C: Trevean		yes				
C: Trevelgue	yes	yes	yes		EIA LIA RC	cliff castle
C: Trevinnick	yes	yes	yes		LIA RC MBA	Enclosure
C: Trevisker	yes	yes	yes	yes	LIA RC	Round courtyard house courtyard house courtyard house
C: Trewern		yes				
C: Trink		yes				
C: Try		yes				
C: Wicca Round	No	yes	yes		EIA	Round

Appendix 2

Built space and built percentage

For the percentage of built space, calculations were based upon the total area of structures, including walls and porches. Where possible, the built space of a site was calculated using the methodology offered in 3.11. In some instances specific adaptations to this methodology were necessary. Examples of these adapted methodologies are discussed below.

Key

- A** All or part of the figures used in the calculations for these sites were obtained from plans and sections drawn to scale, due to an absence of measurements included within the text.
- B** Sites where hut platforms or the majority of settlement is visible above ground and as such, the built percentage and the unbuilt area is calculated in relation to the area enclosed, rather than just the area excavated.
- C** Sites where the calculated built percentage is clearly going to be biased or is likely to be un-representative. This includes sites where only a partial or minimum Fig for built space could be calculated, either because the structural evidence within the settlement was so great that separate structures could not be identified, or conversely, too fragmentary, or because the majority of structural evidence apparent was beyond the edge of excavation. When used, these Figs will be highlighted as minimum values for built percentage.

Bodriftty (B)

The excavation report gave a single external diameter for structures F, G, H, L and A1. Internal and total areas for structures B and E were gained from measurements given within the site report. Two phases of wall building, marking an increase in the width of the wall were noted for structure E and two areas, for phase 1 and phase 2 were formulated accordingly.

B: internal: $(2.92 \times 2.74) \times 0.8 = 6.40 \text{ sq m}$. External ('plus 3ft walls'): $(3.83 \times 3.65) \times 0.8 = 11.18 \text{ sq m}$

CII: Internal: $(3.50 \times 3.50) \times 3.14 = 38.57 \text{ sq m}$ External*: $(5.024 \times 5.024) \times 3.14 = 79.25 \text{ sq m}$

CI: overlain by B; unable to recreate structure

F: External? $(2.286 \times 2.286) \times 3.14 = 16.41 \text{ sq m}$

E: Internal: $(3.810 \times 3.810) \times 3.14 = 45.58 \text{ sq m}$ External Phase 1: $(5.029 \times 5.029) \times 3.14 = 79.41 \text{ sq m}$ Phase 2: $(6.4 \times 6.4) \times 3.14 = 128.61 \text{ sq m}$

G: External?: $(3.352 \times 3.352) \times 3.14 = 35.28 \text{ sq m}$

H: External?: $(3.2 \times 3.2) \times 3.14 = 32.15 \text{ sq m}$

L: External? overlain by AI: $(2.743 \times 2.743) \times 3.14 = 23.63 \text{ sq m}$

M: overlain by AI: Internal*: $(2.6 \times 2.6) \times 3.14 = 21.23 \text{ sq m}$ External*: $(3.6 \times 3.6) \times 3.14 = 40.69 \text{ sq m}$

AI: $(4.175 \times 4.175) \times 3.14 = 54.73 \text{ sq m}$

K: (outside enc) $(2.438 \times 2.438) \times 3.14 = 18.66 \text{ sq m}$

Internal area of enclosure: 3 acres (12140.58 sq m)

St Mawgan-in-Pyder (A)

St Mawgan-in-Pyder produced evidence of several structures during partial excavations in the northern and western areas of the hillfort. Scale drawings were used to provide dimensions for structures W, X and A. One edge of structure A could not be discerned, but an approximate dimension was achieved using partial measurement given within the report. The dimensions for structures Y, V, D and E were all given within the text of the report.

W: Internal*: $(6.096 \times 7.223) \times 0.8 = 35.23$ sq m External*: $(9.14 \times 8.38) \times 0.8 = 61.27$ sqm

A: Internal*: $(5.486 \times 6.309) \times 0.8 = 27.68$ sq m External*: $(7.310 \times 6.309) \times 0.8 = 36.90$ sq m

V: External: $(2.743 \times 2.743) \times 3.14 = 23.63$ sq m

D: External: $(3.81 \times 3.81) \times 3.14 = 45.58$ sq m

E: External: $(3.81 \times 3.81) \times 3.14 = 45.58$ sq m

X: External*: $(2.499 \times 3.169) \times 0.8 = 6.34$ sq m

Y: External: $(4.876 \times 4.876) \times 3.14 = 74.65$ sq m

Z: too fragmentary to be analysed

Total excavated area measured from scale plan: 1555.87 sq m

Goldherring (A)

The phasing of Goldherring are discussed in detail within the main text, in relation to the structure of courtyard house belonging to Phase 2. Of the earlier, pre courtyard house occupation (Phase 1), structure L is the only structure upon which any calculations can be derived. Hints of other built structures associated with Phase 1 occupation are apparent, including a possible 'courtyard', but none are certain enough to warrant inclusion within the structural analyses. The percentage

of built space relating to Phase 1 is thus a minimum value. Phase 2 occupation relates to the developed 'courtyard house structure' but excludes Hut B, which dates later than the remit within this thesis. All measurements have been taken from scale plans:

Structure L (Phase 1)*: $(7 \times 5.5) \times 0.8 = 30.8$ msq

D-SE and D-SW (courtyard)*: $9 \times 9 = 81$ msq

F (round room)*: $(5.5 \times 7) \times 0.8 = 30.8$ msq

D-R (long room)*: $3 \times 9 = 27$ msq

D-A (side chamber)*: $(3 \times 5) \times 0.8 = 12$ msq

Hut B (3rd-4th century).

Total area excavated: 561.1 sqm*

Total area of enclosure: enclosure*: $(30 \times 40) \times 0.8 = 960$ sqm

Killibury (C)

A wealth of postholes and evidence for other activity was revealed in the small-scale excavations that took place at Killibury hillfort. Amongst the concentration of postholes, four posterns and circular structures are thought to be represented, but the density of these is so great that for the most part, the distinction of structures is largely conjectural. Although the identification of abandonment soils does suggest distinct phases of settlement, associating specific structures and absolute dates to these phases from the excavation report, remains essentially speculative. Only one structure can be identified with any confidence, and this has been used to provide a minimum value for the percentage of built space. This will undoubtedly be an underestimate however, and will be highlighted as such whenever it is included within statistical comparisons.

Structure 1: $(4.5 \times 4.5) \times 3.14 = 63.59$ sq m

Excavated area: 210 sq m within the inner enclosure.

Strip placed in between the inner ditch and outer rampart = $1 \times 12.5 = 12.5$ sqm

Total = 222.5 sq m

Area of inner enclosure: 0.75 ha = 7500 sq m

Castle Gotha (C)

1 stone oval structure, at least three timber structures.

387.75 msq internal

516.75 msq with ditch cuts

Rectangular structure using sleeper beams – of very different construction, no dating evidence – suggested that it could date much later and is thus not considered here. A flat bottomed gully, similar to the sleeper trenches, contained 16th century pottery, a Roman rim sherd and a flint flake (NB the ‘Iron Age’ lynch pins have been reassessed by JD Hill as medieval lynch pins).

Tentative suggestion that in the southern area, PH 22, 21, 19, 153 and 154 could for a structure, but from the plan this seems unlikely and this possible structure has been excluded from the analysis of built percentage.

Central area had clear signs of activity and possibly domestic habitation; certainly built space – but too partial excavation in this area to make any judgement.

North eastern area:

structure TH: occupation layer of burnt reddish clay (natural), with stone and charcoal trampled in. 1 shillet hearth (290), 1 roughly circular hearth with a shillet

slab at the bottom (302) (to the northern interior of the structure), and 1 patch of burning with a Pentewan stone in it. All three close together in the NW quarter of the structure. Part of the edge of the structure is still uncovered thus dimensions are very tentative. A calculation of the occupation area **shown** is *c.* $4.3\text{m} \times 4.3\text{m} = 18.49 \text{ sq m}$. Cut through this floor were several post holes – which contained pottery, and one of which contained a bronze ring.

Structure TJ:

Four postholes apparently forming the arc of a small circular structure – one of these had a post pipe and another, blue slates vertically packed around the edges, and a sherd and a whetstone in the filling. Only *c.* 2.5m diameter (estimated). $(1.25 \times 1.25) \times 3.14 = 4.906 \text{ msq}$.

Above this, the stratigraphy gets complex, several floors are discussed; apparently above this structure, but there is no way of attributing absolute dates to broader relative chronologies to these.

TA/TB Evidence of occupation; hearths, charcoal, post holes with post pipes and some disturbed areas which appear to have been re used two or three times.

The oval hut was the main feature of occupation within the round and must have destroyed much evidence of earlier occupation. Its stone wall outlined an oval or ‘boat-like’ shaped structure, 12m long and 5.80m wide, and cut into the tail of the rampart on the east. The structure was only one stone wide and presumably backed with earth or turf. One side was supported by posts/left open.

Porthmeor (A)

Internal area of enclosure described in text as 1 acre = **4,046.85 sq m**

External area measurements for courtyard house 1, courtyard house 2 and courtyard house 23 at Porthmeor were taken from the SMR.

The external areas for additional structures within the enclosure were measured from the scale plans (from Hirst 1937):

(Scale: 3ft = 1cm)

HC1: 9.5cm x 6cm (oval) = (28.5 ft x 18 ft) x 0.8 = 410 sq ft = 38.09 sq m

Covered porch ways associated with HC1: 36 sq ft and 54 sq ft = 90 sq ft = 8.36 sq m

Total external area for HC1: 38.09 + 8.36 = **46.45 sq m**

(Scale: 2.5ft = 1mm)

H6 and H7 complex (rectangular): 27mm x 10mm = 67.5 ft x 25 ft = 1687.5 sq ft = **156.77 sq m**

H5: 7mm diameter (circle) = 17.5 ft diameter = (8.75x8.75)x3.14 = 240.41 sq ft = **22.33 sq m**

H8: 7mm diameter (circle) = 17.5 ft diameter = (8.75x8.75)x3.14 = 240.41 sq ft = **22.33 sq m**

Bodwen (A)

No evidence of structures were found within the interior after partial excavation:

Total excavated area: 46 sqm*

Total area of enclosure: 2,374.4 msq*

Built area

ID	SITE	Structure 1	Structure 2	Structure 3	Structure 4	Structure 5
1	Bodrifty	B: internal: (2.92x2.74)x0.8= 6.40sqm. External ('plus 3ft walls'): (3.83x3.65)x0.8=11.18 sqm	CII: Internal: (3.50x3.50)x3.14= 38.57 msq External*: (5.024x5.024)x3.14=79.25 sqm	CI: overlain by B; unable to recreate structure	F: External? (2.286x2.286)x3.14= 16.41 msq	E: Internal: (3.810x3.810)x3.14= 45.58 msq External Phase 1: (5.029x5.029)x3.14=79.41 sqm Phase 2: (6.4x6.4)x3.14=128.61 sqm
2	Gurnards Head	Hut A External: (6. 09x4.88)x0.8=23.77 msq Internal* - (2.3x2.3)x3.14=16.61	Hut B+ External (inc porch)* - (8.5x9)x0.8=61.2 msq Internal* (6.2x6)x0.8=29.76 msq	Hut C External (including porch) * - (6.5x8)x0.8 = 41.6msq Internal (3.8x4.7)x0.8=14.28 msq	remaining 13 - weatherall gives average diameter of 6m, (3x3)x3.14=28.26 - x13	
21	Trevelgue	Structure 1: internal: (7x7)x3.14=153.86 msq external: (8.8x8.8)x 3.14 = 243.1616 2 or 3 other structures exc, no data though				
23	Castle Dore					
24	Killibury	Structure 1: (4.5x4.5)x3.14=63.59 msq				
28	Carn Brea (dimensions given in text)	HC 1: External: (5x5)x3.14= 78.50 Internal: (4x4)x3.14= 50.24	HC2: External: (4.5x4.5)x3.14= 63.59 Internal: (3.5x3.5)x3.14= 38.47	HC3: External: (4.5x4.5)x3.14= 63.59 Internal: (3.5x3.5)x3.14= 38.47 msq	HC4: External: (4x4)x3.14= 50.24 Internal: (3x3)x3.14= 28.26 msq	HC5: External: (5x5)x3.14= 78.50 msq Internal: (3.5x3.5)x3.14= 38.47 msq
30	The Rumps	HC behind innermost rampart: External: (3.2x3.2)x3.14=32.15 sqm			Other Hut Platforms present but no areas achievable	
31	Penhale (cliff castle)	Structure 1: No data				

Built area

ID	SITE	Structure 1	Structure 2	Structure 3	Structure 4	Structure 5
32	Threemilestone	gully/structure 8: External: (3x3)x3.14= 28.26 msq	gully/structure 12 (cuts 8 on different orientation): external: (2.5x2.5)x3.14=19.625 msq	Structures 9, 11, and 15 are too partial to measure.	gully/structure 13: external: (3.5x3.5)x3.14=38.47 msq. Gully 14 prob.associated with 13.	
36	St Mawgan in Pyder	W: Internal*: (6.096x7.223)x0.8=35.23 sqm External*: (9.14x8.38)x0.8=61.27 sqm	A: Internal*: (5.486x6.309)x0.8=27.68 sqm External*: (7.310x6.309)x0.8=36.90 sqm	V: External: (2.743x2.743)x3.14=23.63 sqm	D: External: (3.81x3.81)x3.14=45.58 sqm	E: External: (3.81x3.81)x3.14= 45.58sqm
56	Bodwen	No Structures found in partial excavations				
62	Hayne Lane	RH 459 (plus porch): (3.4x3.4)x3.14=36.30 msq + 2.5x2=5 msq total = 41.30 msq	RH 458 (plus porch): (4.65x4.65)x3.14=67.89 + 2x1=2 msq total= 69.89 msq.			
63	Langland Lane	Supposed structure - external measurements taken from the internal diameter of the gully (assuming	the structure is turf built) (6.25x6.25)x3.14=122.66			
72	Goldherring	Structure L (Phase 1)*: (7x5.5)x0.8=30.8 msq	D-SE and D-SW (courtyard)*: 9x9 = 81 msq	F (round room)*: (5.5x7)x0.8=30.8 msq	D-R (long room)*: 3x9=27 msq	D-A (side chamber)*: (3x5)x0.8= 12msq
88	Trevinnick	Structure 1 (7.62x6.7056)x0.8=40.877 (and times by two as the second structure, partially excavated, looks roughly the same)				
97	Callestick	Structure 1 (plus porch):				

Built area

ID	SITE	Structure 1	Structure 2	Structure 3	Structure 4	Structure 5
		(4x4)x3.14 + (4x1.1)=54.64 sqm				

Built area

Structure 6	Structure 7	Structure 8	Structure 9	Structure 10	Structure 11
G: External?: $(3.352 \times 3.352) \times 3.14 = 35.28$ msq	H: External?: $(3.2 \times 3.2) \times 3.14 = 32.15$ msq	L: External? overlain by AI: $(2.743 \times 2.743) \times 3.14 = 23.63$ msq	M: overlain by AI: Internal*: $(2.6 \times 2.6) \times 3.14 = 21.23$ msq External*: $(3.6 \times 3.6) \times 3.14 =$ 40.69 sqm	AI: $(4.175 \times 4.175) \times 3.14 = 54.73$ msq	K: (outside enc) $(2.438 \times 2.438) \times 3.14 = 18.66$ m
HC6: External: $(10 \times 9) \times 0.8 = 72.00$ msq Internal: $(3 \times 3) \times 3.14 =$	HC7: External: $(6 \times 6) \times 3.14 = 113.03$ sqm Internal:	HC8: External: $(4 \times 4) \times 3.14 = 50.24$ Internal: $(2.5 \times 2.5) \times 3.14 =$	HC9: External: $(4 \times 4) \times 3.14 = 50.24$ Internal:	HC10: External: $(4.5 \times 4.5) \times 3.14 = 63.59$ Internal	HC11: External: $(5 \times 5) \times 3.14 =$ 78.50 sqm Internal: $(3.5 \times 3.5) \times 3.14 = 38.47$ sqm

Built area					
Structure 6	Structure 7	Structure 8	Structure 9	Structure 10	Structure 11
28.26 msq	$(4.5 \times 4.5) \times 3.14 = 63.59$ sqm	19.63	$(2.5 \times 2.5) \times 3.14 = 19.63$	$(3.5 \times 3.5) \times 3.14 = 38.47$	
X: External*: $(2.499 \times 3.169) \times 0.8 = 6.34$ sqm	Y: External: $(4.876 \times 4.876) \times 3.14 = 74.65$ sqm	Z: too fragmentary to be analysed			
Hut B (3rd-4th century).					

Built area

Structure 6	Structure 7	Structure 8	Structure 9	Structure 10	Structure 11

Appendix 3

Geomagnetic Survey

1. The Survey Programme

In May 2005 and 2006 a number of sites of known or probable Iron Age and/or Roman date were surveyed for the benefit of this thesis. The objectives of these surveys were three-fold. In the first instance, the research programme intended to clarify the archaeological potential of geophysical survey upon the primarily igneous geologies of Cornwall. By current standards, fluxgate gradiometry is regarded as a relatively unsuitable technique for igneous geologies, and the amount of geophysical survey previously undertaken in the region is limited as a result. Recent work undertaken by ASUD and the University of Durham upon the igneous geologies of south east Scotland however has shown that this observation no longer holds true, for this region at least. Modern fluxgate gradiometers do appear able to distinguish archaeological features located upon igneous bedrocks. With this in mind, it was decided to re-examine the potential for fluxgate gradiometry as a useful geophysical technique for examining sub surface archaeological features within the igneous landscape of Cornwall.

The second objective of the survey programme was to provide further detail regarding the potential nature and extent of activity both within and outside of enclosures of probable Iron Age and/or Roman date. The varied nature of activity within and around enclosures is increasingly noted (e.g. Haselgrove *et al.* 2001) and the geophysical survey of relatively large areas in a comparatively small amount of time provides a good opportunity expand our knowledge of this variation, by identifying similarities and differences in the ways in which a number of

enclosures, including those that are closely related morphologically, were being used.

The third aim of these surveys relates more specifically to the spatial analyses of Later Iron Age and early Roman settlement, undertaken within the thesis. In order to interpret and extrapolate certain analyses (for example, the percentages of built to un-built space), it is useful to know whether the evidence for settlement activity uncovered within the partial excavation of a site is indeed representative of the entire of the enclosure. By undertaking survey upon a number of partially excavated sites, the evidence gained from excavation can be placed within its wider spatial context; enabling stronger site specific interpretations regarding the use and organisation of space within enclosures to be formed.

2. The Parameters of the Survey

2.1 Standards

The surveys were conducted with reference to English Heritage (1995) Research and Professional Services Guidelines No. 1, *geophysical survey in field evaluation*; the Institute of Field of Archaeologists (1991) Technical Paper No. 9, *the use of geophysical techniques in archaeological evaluations*; and the Archaeology Data Service (2001), *geophysical data in archaeology: a guide to good practise*.

2.2 Technique selection

Magnetometry survey provides a relatively speedy, and crucially, non-invasive identification of archaeological features within a variety of landscapes. Due to an anticipated range of cut, built and fired features, magnetometer survey using a

fluxgate gradiometer was chosen as an appropriate detection method. Fluxgate gradiometry involves the use of a hand-held magnetometer to detect and record minute 'anomalies' in the vertical component of the earth's magnetic field. These anomalies often reflect the presence of archaeological features.

2.3 A Field methods

A 20m x 20m grid was established across each survey area and tied into known, mapped, ordnance survey points using tapes. Measurements of vertical geomagnetic field gradient were determined using a Geoscan FM256 fluxgate gradiometer fitted with a sample trigger to enable the automatic logging of data. A zig-zag traverse scheme was used and data were logged within each 20m x 20m grid unit. The instrument sensitivity was set to 0.1 nT (nanoTesla), the sample interval to 0.25m and the traverse interval to 0.5m, thus generating 3200 Sample measurements for every 20m grid surveyed (unless stated otherwise). Data were downloaded on-site, and stored in a laptop prior to processing, interpretation and archiving.

2.4 Data processing

GeoPlot v.3 was used to process the geophysical data and produce continuous tone greyscale images of the raw data. These images have been imported into digital plans of their respective sites and aligned in relation to the grid established at the time of survey. Positive magnetic anomalies are displayed as dark grey and negative magnetic anomalies as light grey. A palette bar relates the greyscale intensities to anomaly values in nT.

The following basic processing steps have been applied to the gradiometer data:

- *Zero Mean Traverse*: this function sets the background mean of each traverse within a grid to zero.
- *Interpolate*: This function is used to increase the number of data points within a survey, in order to create a smoother appearance to the data.
- *Destagger*: this function corrects the displacement of anomalies caused by alternate zig-zag traverses, often observable in gradiometer data when the sample interval is less than 1 metre.

3. Survey Results

3.1 Carvossa

Carvossa is a ditched, sub-rectangular enclosure, 2 ha in extent. The surviving banks of the enclosure at Carvossa now define a single field, currently used for the grazing of cows. The solid geology of the area is igneous and comprises of rhyolite, trachyte, felsite, elvans and associated allied types.

The site at Carvossa was excavated between 1968 and 1970 (Douch & Beard 1970), with excavation concentrating upon the area surrounding the probable entrance, to the east of the enclosure. The main interior of the enclosure had not received any archaeological investigation, prior to this magnetometry survey. ‘South Western Decorated wares’ comprise the earliest pottery recovered from the site, dating to the Late Iron Age. A range of Samian wares were also recovered, suggesting a continuous sequence beginning, at the very latest, in the Tiberio-Claudian period (*c.* AD 14-54) and ending during the mid second century AD. Coins and other imports retrieved during excavation indicate a peak of occupation or use during the Hadrianic period (*c.* AD 117-138), with further activity continuing into the third century AD. Excavation of the ditch discovered that up to 1.5 metres of silt had

accumulated beneath the earliest sherd of samian ware, indicating that the rectilinear enclosure originated to the Late Pre-Roman Iron Age. Neither the ditch, nor the excavated entrance was of Roman military type (Douch & Beard 1970).

So far, only one Roman fort has been positively identified in Cornwall, at Nanstallon, west of Bodmin. The artefacts retrieved from the limited excavations at Carvossa have been used in the past to suggest the presence of a military fort at this site, established in part of the rectangular enclosure just after the Roman invasion of Britain in AD 43 (Quinnell 1986:122-123). If this was the case, the range of artefacts, it has been suggested, may have derived from a vicus located close to the fort. In addition, the site may have become a local stronghold, handed over to the control of a local chief or group c. AD 75, in line with 'the regular practise of turning over military bases to serve as local centres of administration and trade under Roman supervision' (Quinnell 1986:122).

3.2 Carvossa: research objectives

"No more work on sites west of Bodmin Moor should be sponsored...an exception (being) Carvossa, where the richness of earlier finds, coupled with complexities in the earthwork sequence and possible military links (require further investigation)..." (Quinnell 1986: 130).

The site of Carvossa is in dire need of further fieldwork, to help clarify the extent and nature of occupation. According to local tradition, Carvossa has been suggested to have once been a Roman fort, and the site has thus become crucial in the current understanding of Cornwall during the Roman period. However, inconsistencies exist between the information gathered from excavation and the interpretation of the site (e. g. the non-military nature of the ditch and entrance). In addition, an absence

of further research within the interior of the main enclosure, subsequent to the excavations between 1968 and 1970, make this geophysical survey timely.

3.3 Results: Carvossa

14 grids, a total of 5600 square meters have undergone geomagnetic survey at Carvossa, near Probus in Cornwall. The geomagnetic results from the survey of Carvossa are included at the back of this appendix (Images 1 and 2).

3.4 Interpretation: Carvossa

A range of positive magnetic and negative magnetic anomalies are present within the plot. These have been highlighted in red and marked on Image 2:

A *Geomagnetic interpretation:*

Positive magnetic linear, running along the edge of grid 14, and in to grid 13.

Archaeological interpretation:

This linear anomaly may relate to a soil filled ditch that surrounded the enclosure during (a) phase(s) of occupation.

B *Geomagnetic interpretation:*

Lines of strong positive magnetic 'spots', situated within grids 11, 12, 13 and 14.

Archaeological interpretation:

This group of anomalies may relate to soil filled pits, arranged in vertical alignments.

C *Geomagnetic interpretation:*

Positive magnetic curving linears running through grids 1, 2 and 6.

Archaeological interpretation:

These linears appear to mirror each others paths and may thus be contemporary. They may relate to the soil filled ditches of an earlier enclosure at this site, or to gullies running through the sub rectangular enclosure of Carvossa.

D *Geomagnetic interpretation:*

Clusters of small positive magnetic 'spots', situated within grids 7 and 10.

Archaeological interpretation:

These may relate to groups of soil filled postholes, possibly relating to circular structures present within the enclosure.

E *Geomagnetic interpretation:*

Linears of small spot like positive anomalies, arranged in a rectangle. On the inside edges of this rectangle, to the west and north, are negative magnetic linear anomalies. These features are situated within grids 6, 7, 9 and 10.

Archaeological interpretation:

These clusters of positive magnetic anomalies may relate to groups of soil filled postholes, possibly relating to a rectilinear structure within the enclosure. The negative magnetic linears may relate to fired structural masonry such as brick built walls.

F *Geomagnetic interpretation:*

Faint positive magnetic linear anomalies, located within grids 3, 6, 9, 11, 12, and 13.

Archaeological interpretation:

These readings may relate to gullies within the enclosure or to the effects of more recent land use such as ploughing.

A number of relatively large dipolar magnetic anomalies have been detected within the plot. These have been highlighted in yellow (G). These are most likely to relate to large ferrous items or concentrations of small ferrous items, or perhaps to fired structures such as hearths. Equally, some of these anomalies may relate to ferrous debris situated above or within the topsoil, but which remained invisible to the surveyors.

On the basis of these findings, the proposition that Carvossa is the site of a Roman fort in Cornwall would appear to be largely unsupported. None of the obvious spatial layout and organisation expected within a fort has been identified through geomagnetic investigation. Of major interest however, is the possible post built rectangular building (E). If the interpretation of these anomalies is correct, this would have been a substantial structure, perhaps relating to an individual or group of local importance, with reference to the proposition that Carvossa was a centre of local administration and trade, albeit operating under Roman supervision. The extent of activity at this site which appears likely to predate the rectilinear enclosure of Carvossa is also worth note.

4. Castle Gotha

The site of Castle Gotha is situated within a field, currently used for the grazing of cattle. Small sections of the bank are still visible in places, as a slight curved rise in the topography. A line of electricity pylons runs through the field, just to the west of the earthwork. The solid geology of the area is mainly comprised of sandy slates (shillet) of the Meadfoot Beds; Lower Devonian Sand Series (Saunders & Harris 1982:110).

Castle Gotha is a small oval enclosure or 'round', defined by a single bank and ditch. The site at Castle Gotha was partially excavated during five short seasons of excavation between 1957 and 1962 (Saunders & Harris 1982). Excavation trenches were laid out to investigate the bank and ditch in three different areas; to the south, north-west and north-east. In addition, to areas within the interior received archaeological excavation; one to the south and one to the north-east. Evidence for several timber structures with associated occupation layers were found within the interior. Occupation within the round appears to have begun at some point during the first century BC, intensifying in the first century AD and ending in to the second century AD (Saunders & Harris 1982:149-150).

Pottery from the base of the plough soil also indicates activity within the area during the early medieval period. The two 'anthropomorphic fittings', initially postulated as the linch-pins for Iron Age chariot wheels have also been re-dated to the medieval period (J.D. Hill pers.comm). Brooches and other bronze objects recovered may also be indicative of small scale metal working at the site.

4.1 Castle Gotha: research objectives

The central aim of the magnetometry survey at Castle Gotha was to identify the presence of any archaeological features, such as circular structures, within areas of the interior that did not undergo excavation during the fieldwork of 1955-1956. It was hoped that, if any additional structures were present within the interior, evidence such as circular arrangements of postholes or semi circular linears representing drip gullies for these structures, might be distinguishable within the geomagnetic plot.

Unlike the majority of Cornwall, Castle Gotha is not located upon igneous geologies. Despite this however, no documented magnetometry survey is known to have been undertaken at this site. Because of the influence Castle Gotha has had upon our understanding of Iron Age and early Roman settlement in Cornwall, the potential information to be gained from areas within the interior as yet unexcavated, would be significant. As such, the geomagnetic survey of Castle Gotha is important and timely.

4.2 Results: Castle Gotha

10 grids, a total of 4000 square meters have undergone geomagnetic survey at Castle Gotha, near Porthpean in St Austell. The results of the geomagnetic survey at Castle Gotha are shown in Image 3.

4.3 Interpretation: Castle Gotha

A range of positive magnetic and negative magnetic anomalies are present within the plot. These have been highlighted and marked on Image 3:

A *Geomagnetic interpretation:*

Strong positive magnetic linear within grids 9 and 10, flanked on both sides thinner by negative magnetic linears.

Archaeological interpretation:

These anomalies reflect the location of the ditch which defines Castle Gotha.

B *Geomagnetic interpretation:*

Large positive magnetic 'spots' to the east of the ditch.

Archaeological interpretation:

These are likely to relate to large cut features within the round, such as pits.

C *Geomagnetic interpretation:*

Positive magnetic linears to the north of the plot.

Archaeological interpretation:

These linears relate to cut features within the round, such as gullies. They may reflect the demarcation of space within the interior of the round, or may relate to activity prior to or subsequent to occupation within the round.

D *Geomagnetic interpretation:*

Positive magnetic linears forming two semi circles in the southern half of the plot.

Archaeological interpretation:

These linears relate to 'cut' features such as gullies or drains. The shape of these linears is indicative of drip gullies, often found around the outside of roundhouses, and may suggest the presence of two structures, or of a structure and associated annexe within this area of the round.

On the basis of these findings, it would appear possible that up to two additional post built structures, and several pits, lie within the unexcavated areas of the interior of Castle Gotha.

5. Golden Hillfort

21 grids, a total of 8400 square meters have undergone geomagnetic survey at Golden hillfort, near Probus in Cornwall. The surviving bank and ditch of Golden

hillfort now define a single field, currently used for the grazing of cows. The solid geology of the area is mostly igneous and comprises of rhyolite, trachyte, felsite, elvans and associated allied types.

Golden is a substantial earth-work enclosure, 330 metres x 200 metres, sub-rectangular at its western end and tapering to a point at its eastern end. A single bank and ditch enclosed the site and these remain extant to the north and west, standing up to four meters high and one meter deep respectively. Morphologically, this site is classified as a hillfort of likely Iron Age origin.

Traditionally, hillforts have been regarded as settlements of local elites (Cunliffe 1991, Herring 1994), but more recent study has shown that the nature and intensity of use at the sites varies greatly, indicating a more varied social role; as local centres for community based activities perhaps (see Stopford 1987). Although Golden hillfort has not undergone any documented excavation, the nature of activity at this site has been speculated upon. Quinnell has suggested the site may have been the location for a Roman fort, which supplied other local contemporary settlements such as Carvossa (Quinnell 1986:122). In addition, it has been postulated that Golden was the trading settlement of *Voliba*, listed and mapped by the Greek geographer Ptolemy (Weatherhill 2000).

5.1 Golden hillfort: research objectives

Due to a lack of any documented excavation at Golden hillfort, the primary aim of this survey is to gain an appreciation of the nature and extent of archaeological activity within the enclosure. The presence or absence of internal subdivisions, structures or working areas may all become apparent through the geomagnetic investigation of this site.

5.2 Results: Golden Hillfort

The results of the geomagnetic survey from Golden Hillfort are shown in figure Image 4.

Having downloaded the grids from Area 1 on site, a lack of apparent archaeological features and a concern for the large size of site and relatively short period of time available lead to a reduction in the number of sample measurements taken within Area 2. For grids in Area 2, the sample interval was 0.5m and the traverse interval 1.0m, thus generating 800 sample measurements for every 20m grid surveyed.

5.3 Interpretation: Golden hillfort

Background noise from the igneous geology was quite strong within the plots achieved at Golden hillfort. Despite this however, several positive magnetic and negative magnetic anomalies can be discerned within plots 2 and 3. These are discussed below. Plot 1 was absent of any obvious geomagnetic features.

A *Geomagnetic interpretation:*

Four positive magnetic linears can be seen running diagonally across plots 2 and 3, forming a probable cross within the interior of the hillfort. Strong negative magnetic anomalies are also visible on one or both sides of these linears.

Archaeological interpretation:

These linears may relate to ditches, possibly with stone facing and/or walls, which were used to divide the interior of the hillfort. Interestingly, a similar interior boundary division also exists at Castle Canyke hillfort

near Bodmin. Although this division is now formalised by stone walling, the evidence from Golden may indicate that the origin of this division is much earlier in date.

B *Geomagnetic interpretation:*

A number of strong 'spot like' positive anomalies are present in plot 2.

Archaeological interpretation:

These may relate to cut features such as pits.

The geomagnetic evidence recovered from Golden remains inconclusive. On the basis of these findings, the proposition that Golden is the site of a Roman fort in Cornwall would appear to be largely unsupported. None of the obvious spatial layout and organisation expected within a fort has been identified through geomagnetic investigation. The suggestion that Golden was an Iron Age trading post however remains possible.

Some features of likely archaeological origin have been identified, which may relate to the division of space within the interior. Evidence of occupation however, in the form of circular gullies and post holes for example which may relate to Iron Age structures, are noticeably absent. On the basis of apparent subdivision within the interior it could be tentatively suggested that Golden hillfort was used, at least for some of the time, for pastoral activities. However, geomagnetic 'noise' within the plots, resulting from the igneous geology, may have affected the clarity with which additional archaeological features can be observed.

6. Trevisker Round

12 grids, a total of 4800 square meters have undergone geomagnetic survey at Trevisker Round, St Eval nr Wadebridge. The vast majority of Trevisker Round is

currently located within the grounds of Trevisker Community Primary School. Sections of the bank and ditch remain visible, although greatly denuded, to the west and south-west of the site. The solid geology of the area is mainly comprised of standstones, quartzites and sandy slates of the Staddon Grit; Lower Devonian Sand Series (ApSimon & Greenfield 1972:305).

Trevisker Round was excavated between 1955 and 1956 (ApSimon & Greenfield 1972). Excavation was restricted by the location of a school and school playground within the outer ditch of the enclosure. Excavation revealed that the site was first occupied in the Bronze Age, when the enclosure comprised of the inner ditch only, within which were two circular post built roundhouses with smaller associated ancillary structures.

The site was re-occupied in the Late Iron Age, at some point around the second century BC or slightly earlier. Initial occupation was restricted to a single structure within the centre of the inner ditch, but when the enclosure was enlarged by the construction of the outer ditch, in the mid first century or before, several more circular structures and associated working areas were added (ApSimon & Greenfield 1972:302). Occupation at Trevisker ended in the mid second century AD.

6.1 Trevisker Round: research objectives

The central aim of the magnetometry survey at Trevisker was to identify the presence of any archaeological features, such as circular structures, within areas of the interior that did not undergo excavation during the 1955 and 1956 fieldwork. It was hoped that, if any additional structures were present within the interior, evidence such as circular arrangements of postholes or semi circular linears

representing drip gullies for these structures, might be picked up within the geomagnetic plot.

Unlike the majority of Cornwall, Trevisker Round is not located upon igneous geologies. Despite this however, no documented magnetometry survey is known to have been undertaken at this site. Because of the influence Trevisker Round has had to our understanding of Bronze Age and Iron Age settlement in Cornwall, the potential information to be gained from areas within the interior that are as yet unexcavated, would be significant. As such, the geomagnetic survey of Trevisker Round is important and timely.

6.2 Interpretation: Trevisker Round

A range of positive magnetic and negative magnetic anomalies are present within the plot. These have been highlighted and marked on Image 5:

A *Geomagnetic interpretation:*

Negative magnetic linear running in a diagonal, north-east/south-west across the plot.

Archaeological interpretation:

This linear relates to a modern service pipe, leading to the class room block.

B *Geomagnetic interpretation:*

Negative magnetic linear and rectangle, to the east of the plot.

Archaeological interpretation:

This feature marks the position of one of the excavation trenches from the 1955/1956 fieldwork. The reduction in magnetic property of the soil

indicated here is likely to have been caused by the higher number of small air pockets within the back fill of the trench.

C *Geomagnetic interpretation:*

There are several positive magnetic and dipolar magnetic 'spots' to the west of the plot.

Archaeological interpretation:

Some are likely to be non-archaeological; caused by ferrous debris lying on top of the playing field (e.g. ring pulls from cans, small change etc). Each grid was searched for such material, before being walked however.

D *Geomagnetic interpretation:*

Positive magnetic and dipolar magnetic anomalies arranged in a circular curve, in the centre of the plot.

Archaeological interpretation:

This area was searched several times for ferrous debris lying on top of the playing field, both before and after being walked. An apparent lack of such material would appear to indicate that these 'spots' are likely to represent the post holes of a circular structure, c. 12 metres in diameter.

On the basis of these findings, it would appear probable that an additional post built roundhouse lies within the previously unexcavated area to the east of the interior, just outside of the inner enclosure. As this structure is within the larger area defined by the outer ditch it would seem probable, although not certain, that it is of Iron Age date.

7. Castle-an-Dinas (St Columb)

6 grids, a total of 2400 square meters have undergone geomagnetic survey at Castle-an-Dinas, near St Columb Major in Cornwall. Castle-an-Dinas is a Scheduled Ancient Monument (SAM 36) and as such is protected under the *Ancient Monuments and Archaeological Areas Act 1979*. It is currently owned by the *Cornwall Heritage Trust*. Large sections of the earthwork remain intact, and the site is occasionally grazed by goats. The solid geology of the area is igneous, mostly comprising of gneiss, mica and schist.

Castle-an-Dinas is a large circular multi-vallate enclosure, 260 metres in diameter. Morphologically, this site can be classified as a hillfort of likely Iron Age origin. Traditionally, hillforts have been regarded as settlements of local elites (Cunliffe 1991, Herring 1994), but more recent study has shown that the nature and intensity of use at the sites varies greatly, indicating a more varied social role; as local centres for community based activities perhaps (see Stopford 1987).

Partial excavations within the interior of Castle-an-Dinas took place between 1962-4. These excavations concentrated upon the area to the north of the interior, close to the spring, and the area close to the inner entrance to south-west. Limited evidence of Iron Age occupation was recovered during these excavations, but no evidence was found relating to activity after this period (Weatherhill 2000:115). During its initial phase of construction, Castle-an-Dinas was univallate, surrounded by a single, relatively insubstantial bank and ditch (Weatherhill 2000:114). The second phase of construction was marked creation of several, much larger banks and ditches and the expansion of the interior of the enclosure. Two Bronze Age barrows are situated within the interior of Castle-an-Dinas hillfort.

7.1 Castle-an-Dinas: research objectives

The central aim of the magnetometry survey at Castle-an-Dinas was to identify the presence of any archaeological features, within the interior of the enclosure. In particular it was hoped that the survey would elude further information in relation to the Bronze Age and Iron Age activity upon this hilltop.

7.2 Interpretation: Castle-an-Dinas

Three types of geomagnetic anomaly have been distinguished within the data (Image 6):

A *Geomagnetic interpretation:*

Several 'spot like' positive magnetic anomalies are present to the north of the larger of the two surveyed areas.

Archaeological interpretation:

These may relate to postholes beneath the surface, but no obvious pattern or form to their arrangement can be clearly discerned.

B *Geomagnetic interpretation:*

Circular arrangement of 'spot like' positive magnetic anomalies, situated to the north east of the robbed barrow.

Archaeological interpretation:

This circular arrangement of possible postholes is the only instance of a possible structure. The structure is small, c. 8-10 metres in diameter, and is made more probable by the presence of a faint positive magnetic shadow following the same line as the possible postholes; indicating perhaps, a bedding trench or gully associated with the structure.

There are no features of likely archaeological significance present within the section of the plot situated between the two barrows.

Due to constrictions on time, caused by bad weather, the amount of magnetometry survey undertaken at Castle-an-Dinas was limited. On the basis of data gathered however, further magnetometry survey at Castle-an-Dinas may well prove profitable, and provide further indications of past activity at this site.

8. Castle-an-Dinas (Ludgvan)

2 grids, a total of 800 square meters have undergone geomagnetic survey at Castle-an-Dinas, near Ludgvan in Nr Penzance. The site of Castle-an-Dinas is situated upon private land belonging to *Castle Granite*. It is a Scheduled Ancient Monument (SAM 36) and as such is protected under the *Ancient Monuments and Archaeological Areas Act 1979*. Large sections of the earthwork remain intact. The site is covered in most places during the summer months by gorse. The solid geology of the area is igneous, mostly comprising of granite, syenite, granophyre and allied types.

Castle-an-Dinas is a small circular multi-vallate enclosure, 133 metres in diameter. Morphologically, this site can be classified as a hillfort of likely Iron Age origin. Traditionally, hillforts have been regarded as settlements of local elites (Cunliffe 1991, Herring 1994), but more recent study has shown that the nature and intensity of use at the sites varies greatly, indicating a more varied social role; as local centres for community based activities perhaps (see Stopford 1987).

No modern excavation of Castle-an-Dinas is documented. Sections of all four enclosure boundaries remain intact however; two inner stone walls and two ditched

earthen ramparts beyond these. In addition, the remains of three circular stone structures are visible within the interior. These have been suggested to be the remains of late Bronze Age/Iron Age roundhouses or of Bronze Age ring cairns. In the late eighteenth century a folly, 'Roger's Tower', built of stone from the enclosure boundaries, was built on top of the second rampart of the hillfort (Weatherhill 2000:97).

8.1 Castle-an-Dinas: research objectives

The central aim of the magnetometry survey at Castle-an-Dinas was to identify the presence of any archaeological features, such as circular structures, within of the interior of the hillfort that are not visible from the surface. In particular it was hoped that the survey would elude further information in relation to the potential function of the three stone circular structures within the interior that are visible from the surface.

8.2 Interpretation: Castle-an-Dinas

A strong negative magnetic anomaly is present in the right hand corner of grid two, but this relates to stone visible on the grounds surface. No other magnetic anomalies of any archaeological significance are present within the plot.

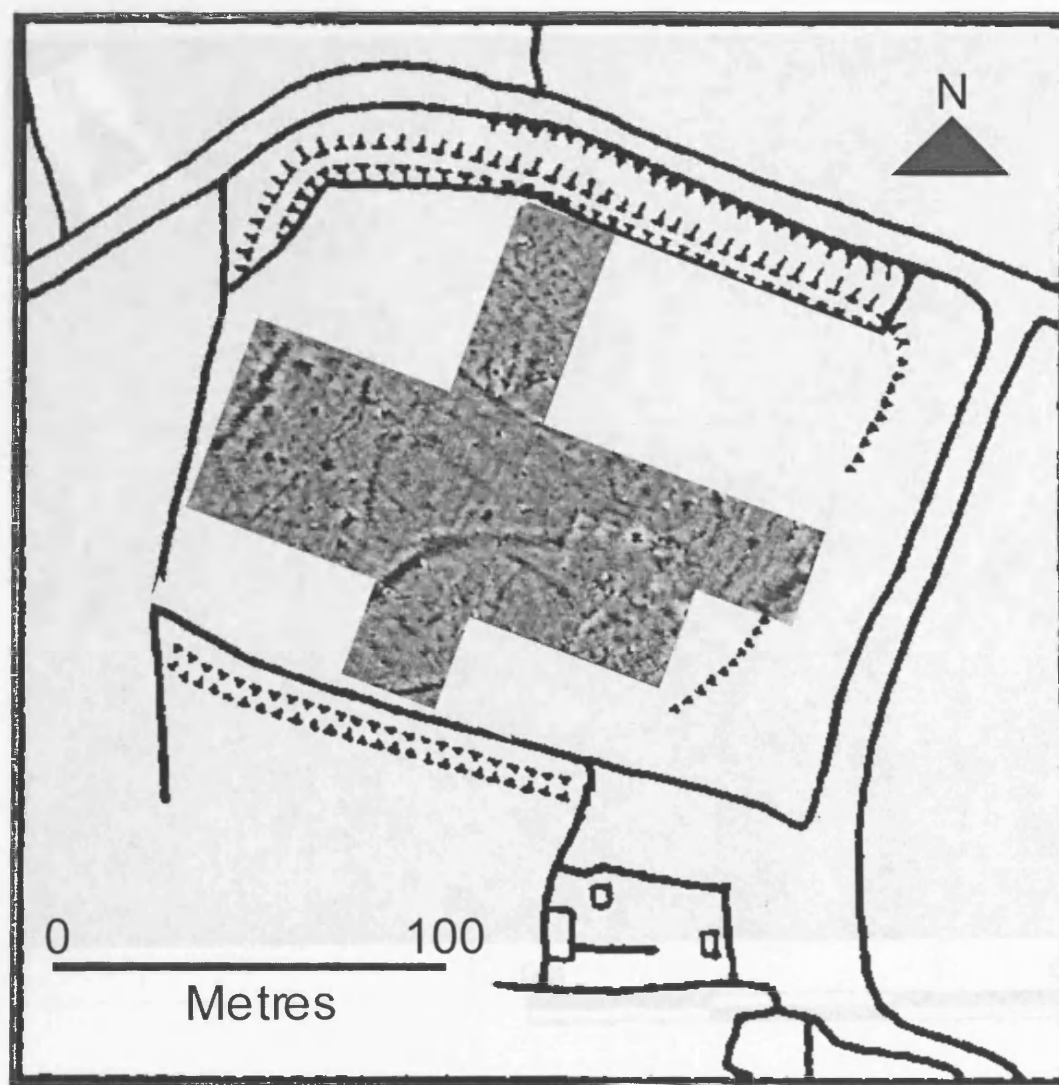
Several factors lead to disappointing results from Castle-an-Dinas. On the day of the survey, the particularly strong heat from the sun made the magnetometer hard to balance and this, together with the presence of gorse across the site, reduced the amount of area that was surveyed that day. Having downloaded the results, it was clear that the strong magnetic qualities of the underlying bedrock were causing a lot interference with the readings of the magnetometer. This would make any

archaeological features, of present very hard to detect. Because of this, it was decided impractical and unnecessary to return to Castle-an-Dinas for a second day to undertake further fieldwork.

To conclude, no features of probable archaeological origin have been identified at Castle-an-Dinas (Ludguvan). This was due to the noise from the local geology igneous being too strong for subtle differences in the magnetic properties of the sub soil to be recorded.

10. Acknowledgements

The surveys discussed above would have been impossible without the help of various individuals and authorities. Grateful thanks go to the Arts and Humanities Research Council, the Rosemary Cramp Fund, the Institute of Cornish Studies, and my parents, all of whom contributed financially with the cost of travel, accommodation and board. The survey data was gathered through the hard work of post-graduate students from the University of Durham and the University of Leicester; namely Ed Blinkhorn, Ed Cork, Jennifer Danis, Rachael Dann, Dave Edwards, Martin Goldberg and Tom White, who grafted without complaint in all weathers. Indebted thanks must also go to my father who, the in weeks of his holidays, helped to survey and re-survey a number of sites with me. Finally, very many thanks to *Trevisker Community Primary School*, *The Trewithen Estate*, *Castle Granite*, *Cornwall Heritage Trust*, Mr David Denning, Mr and Mrs Rosevear and Mr and Mrs Mustill, for allowing us access to their land. A report of each geophysical survey was compiled by the current author, and copies sent to the Cornish Archaeological Unit, the landowners, and English Heritage.



(Original map taken from Weatherhill, 2000)

Image 1. Location of gradiometry survey at Carvossa.

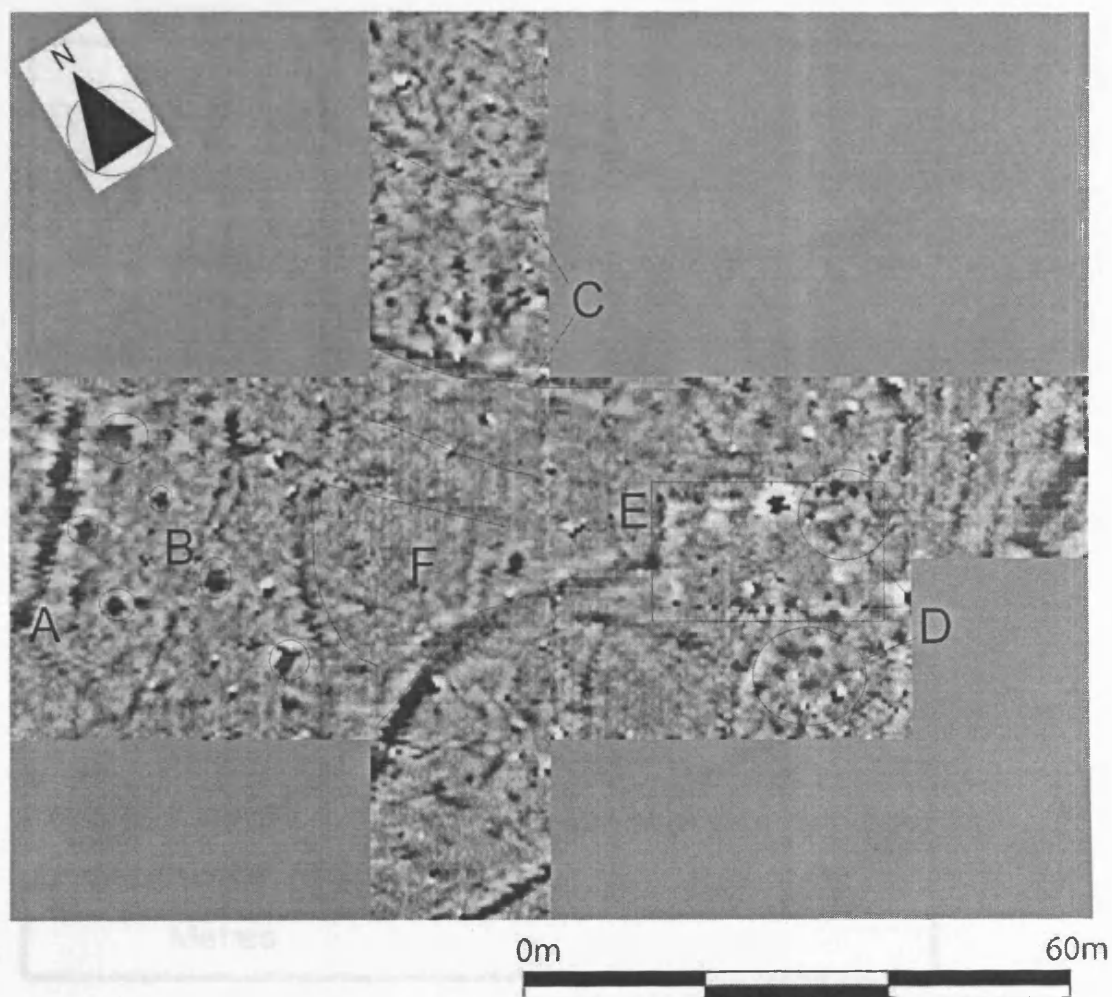
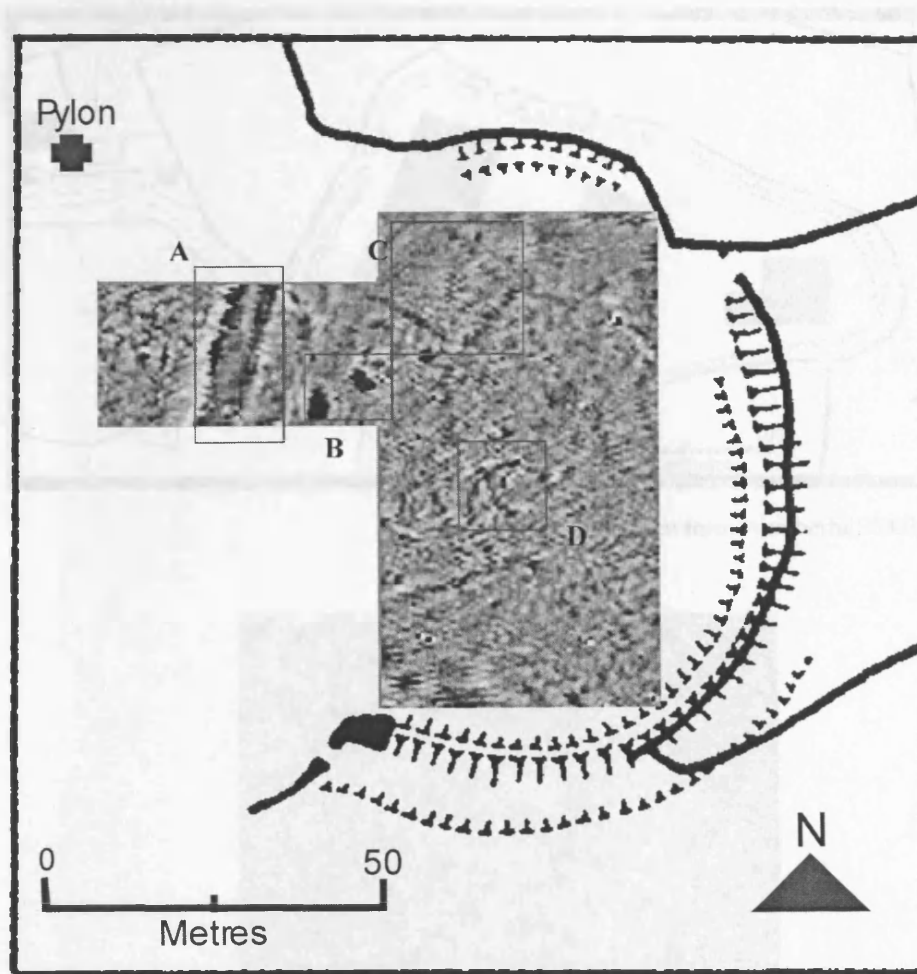
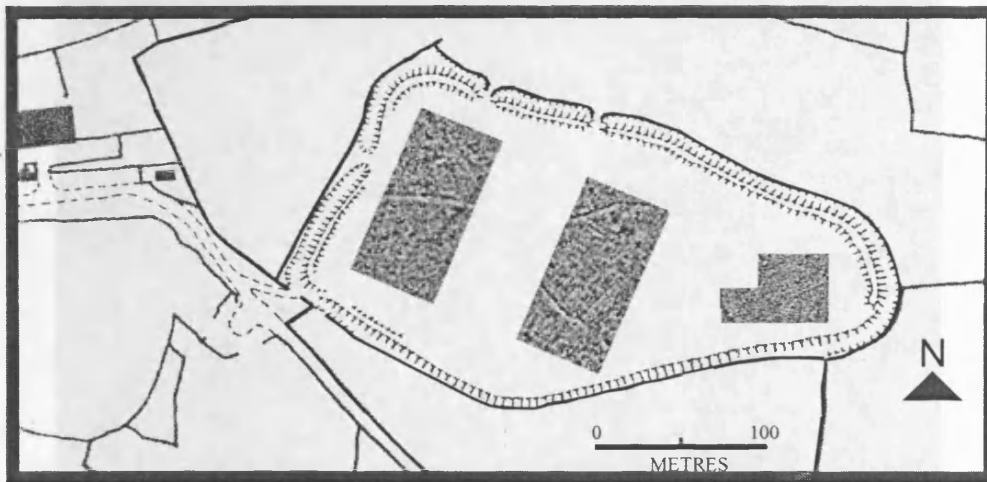


Image 2. Interpretation of gradiometry survey at Carvossa.



(Original map taken from Weatherhill, 2000)

Image 3. Interpretation of the gradiometry survey at Castle Gotha.



(Original map taken from Weatherhill 2000)

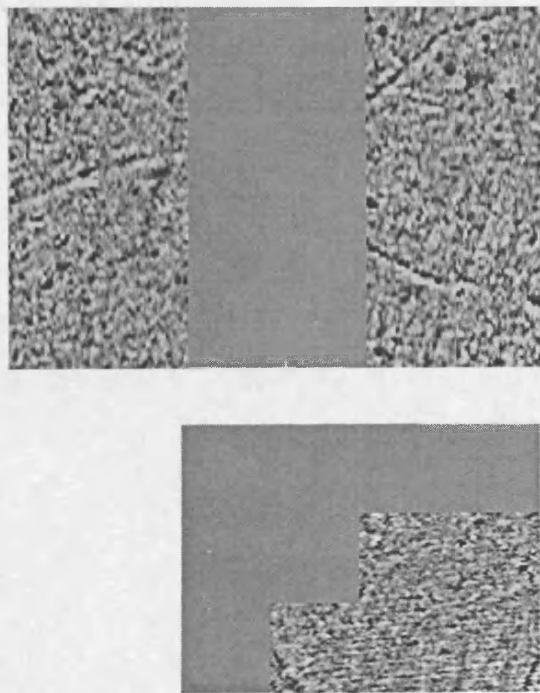


Image 4. Gradiometry survey at Golden Hillfort.

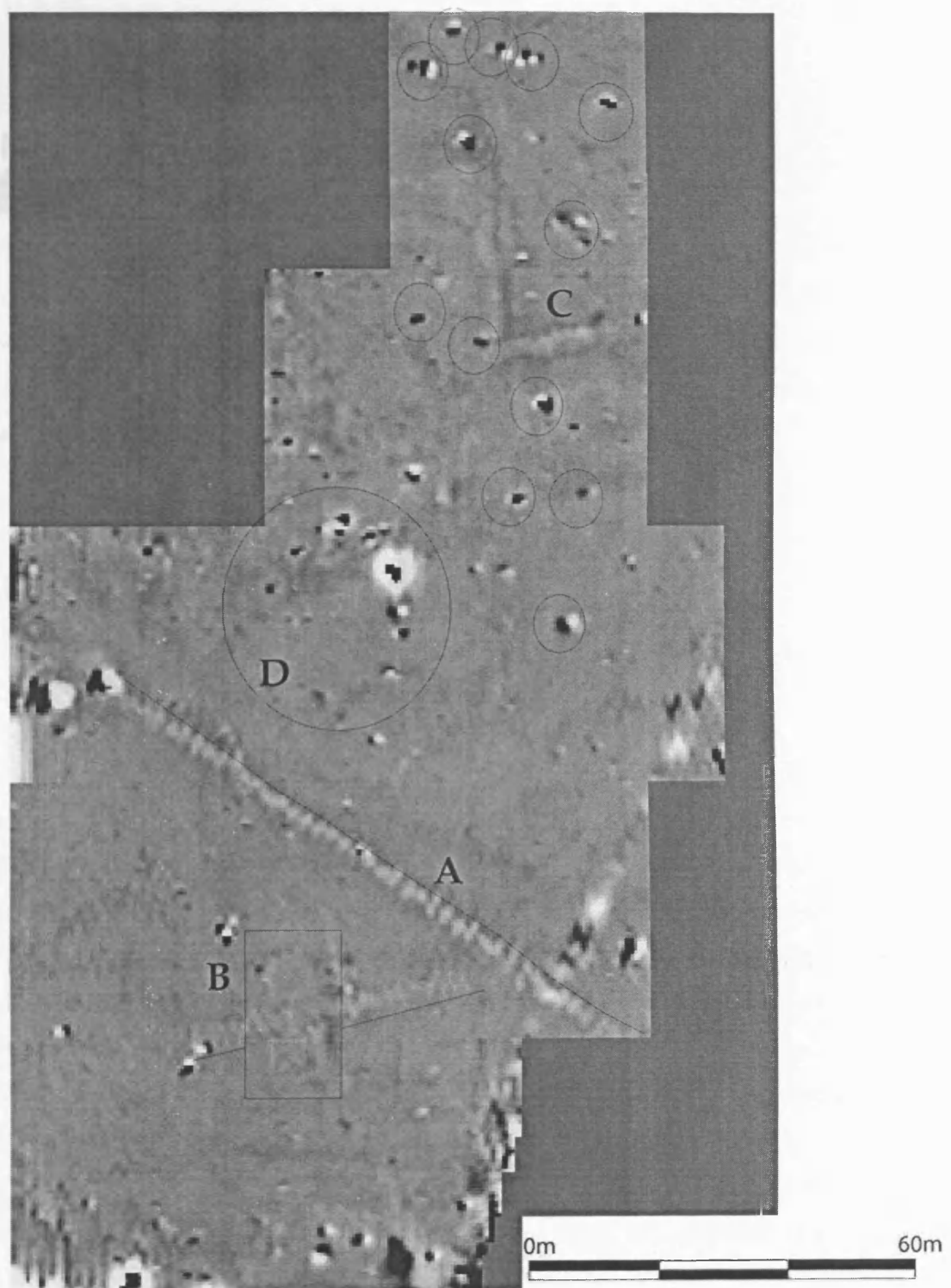
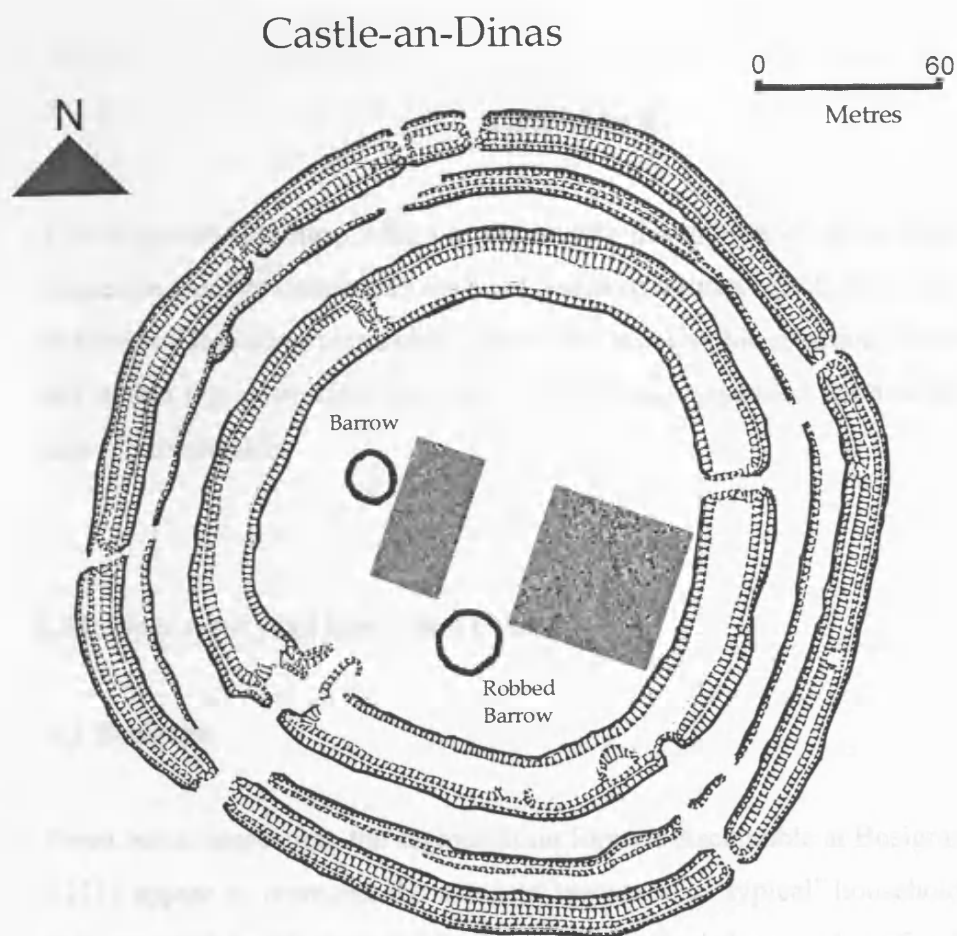


Image 5. Interpretation of gradiometry survey at Trevisker round.



(Original map taken from Weatherhill, 2000)

Image 6. Gradiometry survey at Castle-an-Dinas (St. Columb).

Appendix 4

The following Gazetteer offers a preliminary description of all multiple courtyard house sites and/or excavated courtyard house structures. Each site is also discussed in terms of structure composition, layout and topographic situation. Themes brought out within this discussion have been adopted and expanded upon within the main text of this chapter.

1. Multiple courtyard house sites ('villages')

1.1 Bosigran

From initial inspection, the segmentation formats discernable at Bosigran (1111 and 1121) appear to represent the standard layouts of a 'typical' household. This site was recorded by Hirst in 1937 who also described the remains of a fogou and a banked enclosure surrounding the site. These two elements have since been rejected, but the site does lie within a radial field system which, based upon evidence elsewhere, is likely to have been in use at the same time as the courtyard house settlement. Details within the SMR are vague, but do indicate that courtyard house 2 developed through a gradual accretion of rooms; the round room and single side chamber are suggested to have stood in isolation, before being linked within a courtyard house structure at a later date, which also included a long room. In a third phase of accretion a second round room was added. An additional long room, added to the outside of the courtyard house and accessed externally, may also have been added at this point. This extra room has not been included within the segmentation format however as it is thought more likely within the SMR that this was a much later, modern addition. This process of accretion could reflect an

increase in household numbers and/or expansion in the range of social and economic practices undertaken by the household.

1.2 Bosporthennis

The scattered settlement at Bosporthennis comprises of at least three courtyard houses (CH1, CH2, CH4.1). An additional three possible courtyard houses are discussed within the SMR. After survey however, the nature and extent of these remnants is uncertain and in some instances 'courtyard houses' seem more likely to be clusters of individual hut circles. As such, the segmentation formats of these three potential courtyard houses, all of which have suffered considerable damage, have been classified as 'uncertain'. The site lies at the base of a slope, to the east of Hannibal's Cairn, and is also noted for its 'bee-hive hut' (Jones 1999); a supposed above-ground fogou which lies close of the centre of the settlement.

Courtyard house 1 (1101) at Bosporthennis appears to have developed through accretion; the large round room which has two entrances/exits is likely to have existed as a single circular structure for some time before having a courtyard added and later, a long room. Courtyard house 2 (1101) may also have developed through a process of accretion and included a terraced platform described as a 'paddock', situated to the north. The exact nature of courtyard house 4.1 (1100) is in some doubt, but appears to have been less damaged than the three other 'possible' courtyard house structures, enabling its potential segmentation format to be deduced with more confidence. It seems likely that courtyard house 4.1 was thus a notably large structure on site, but with a simple format of single courtyard and round room.

Whether the remaining structures at Bosporthennis are courtyard houses or groups of single huts, it seems probable that some if not all were contemporary, for a period at least. The presence of these structures, along with the evidence of

accretion strongly indicates pre-courtyard house occupation of Iron Age date however and once again implies a continuity of settlement which included the transformation from 'non courtyard house' to 'courtyard house' structures.

1.3 Bosulow Trehyllys

Bosulow Trehyllys comprises of four identifiable courtyard house structures, with additional circular structures, some of which at least would seem likely to relate to Iron Age, pre-courtyard house settlement at this site. This suggestion is supported by a number of lynchets, incorporated into the layout of the courtyard house settlement. One of the lynchets was partially excavated by the Cornish Archaeological Unit and produced sherds of Late Iron Age pottery (Herring pers.comm. see figure 5.4.2 above). A prehistoric trackway runs along the north-western edge of the Bosulow Trehyllys courtyard house settlement, and leads up Chun Castle 'hill fort', 500 meters to the south-west.

The segmentation formats included for this site have been deduced from the SMR details, scale plans and a field visit. Courtyard house 1 (1211) is recorded as having 2 round rooms, as both circular rooms within this structure are of a relative size and location (opposite the entrance way) that comply with the definition of a round room given within Chapter 5. Courtyard house 2 (1222) has a central courtyard, off of which lay two long rooms, and two round rooms, each of which leads to a smaller circular/oval room. The layout of these rooms directly mirrors one-another, and this may once again represent the dwelling of two familial units incorporated within one household. This structure is different to those of courtyard house 6 at Chysauster and courtyard house 2 at Treen however, in that both units have been built around a single courtyard. As no apparent phasing of the structure has been recorded, this could be of a single build, but in light of the probable longevity of this site and others, it seems more probable that this format once again reflects the

physical extension and adaptation of the structure in line with the changing dynamics of the household.

Courtyard house 2 also displays a rare feature - in the situation of the circular/oval chambers off of the round rooms, and *not* the courtyard. The only other site where this occurs is with courtyard house 1 at Boswarva. Courtyard house 2 at Bosulow Trehyllys also shares similarities with courtyard house 3 at the same site. Here, two courtyards are linked together, meaning one has to enter the structure and move through the first courtyard in order to get into the second courtyard. The round room and two of the circular/oval side rooms are situated off of this second courtyard, and a single circular/oval side room is accessed from the first courtyard.

The arrangements of access in courtyard house 3 would imply that this structure was not a 'double house' for two separate families, as access to the second 'unit' would require passage through the first. This structure may instead indicate a very large family; the second courtyard acting as a round room, and the rooms off of this courtyard providing additional functions. Alternatively, the initial courtyard may have been left open for example, providing an external space within the compound of the house for craft activities or the over-nighting of stock or, perhaps, for communal activities or meetings for example. Either way, the format of rooms in courtyard house 3 at Bosulow Trehyllys strongly implies that the degrees of access and 'privacy' available within this structure were much greater than elsewhere, which in turn might imply that this structure was used more habitually by a wider spectrum of the community.

Courtyard house 4 at Bosulow Trehyllys has a dominant segmentation format (1101), but is attached to a complex of single huts and enclosures to the south and west. Several of these huts are attached, and access the same external space (H9, H10, H11, H7), although in appearance these single huts did not combine to form a composite or cohesive structure in any way visually or spatially similar to the

courtyard houses on site. Of these single huts, hut 7 is the only example to show evidence of partition involving the main stone fabric of the structure; in the extended entrance passage which also helps to form narrow 'side spaces' – a feature that in courtyard houses was frequently developed to construct long rooms. In this respect, hut 7 has arguably adopted an element of the form and spatial ideology of a courtyard house within its construction.

1.4 Boswarva

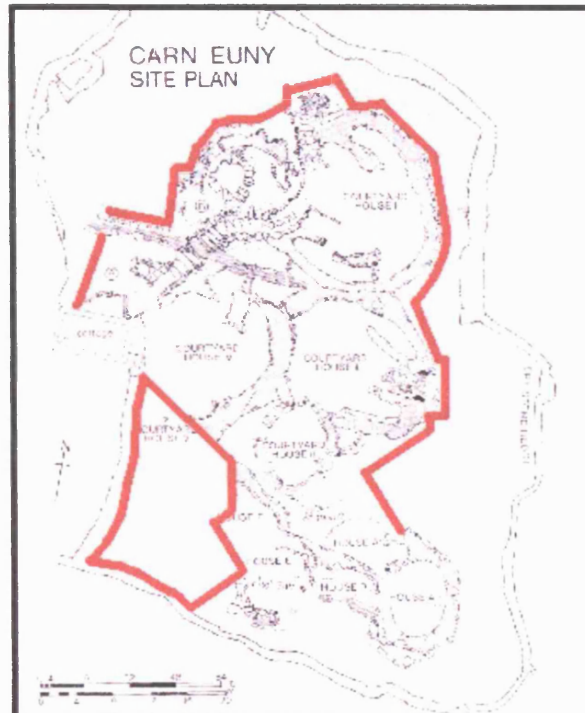
The four structures comprising the courtyard house settlement at Boswarva all appear to have standard household segmentation formats, with three conforming to a dominant format (either 1101 or 1111) and the fourth being closely related (1121). The structures are described as 'fairly widespread' within the SMR, which also records the presence of three single huts, a terraced 'garden plot' and an associated field system. The settlement is situated 180 meters from a Bronze Age barrow.

Courtyard house 1 has a raised round room, off of which one of the circular/oval side chambers is situated. This latter room is then joined to a long room. This depth to the room arrangement at Boswarva is unusual, when compared to the single rooms depth displayed within virtually all other courtyard house layouts. The greater visual and physical penetration required to access this long room might suggest an importance or significance to the room, or to its contents.

To the south east of this courtyard house are the possible remains of an attached composite structure. The number of cells or chambers present is unknown however, and as it stands, it is not clear whether these remains represent a fifth courtyard house. As such, these remains have not been included within the statistics for the site. Other notable features of the structures at Boswarva include the raised round room in courtyard house 2 and the long room of courtyard house 3

which is divided in two, each half accessed by a separate entrance from the courtyard.

1.5 Carn Euny



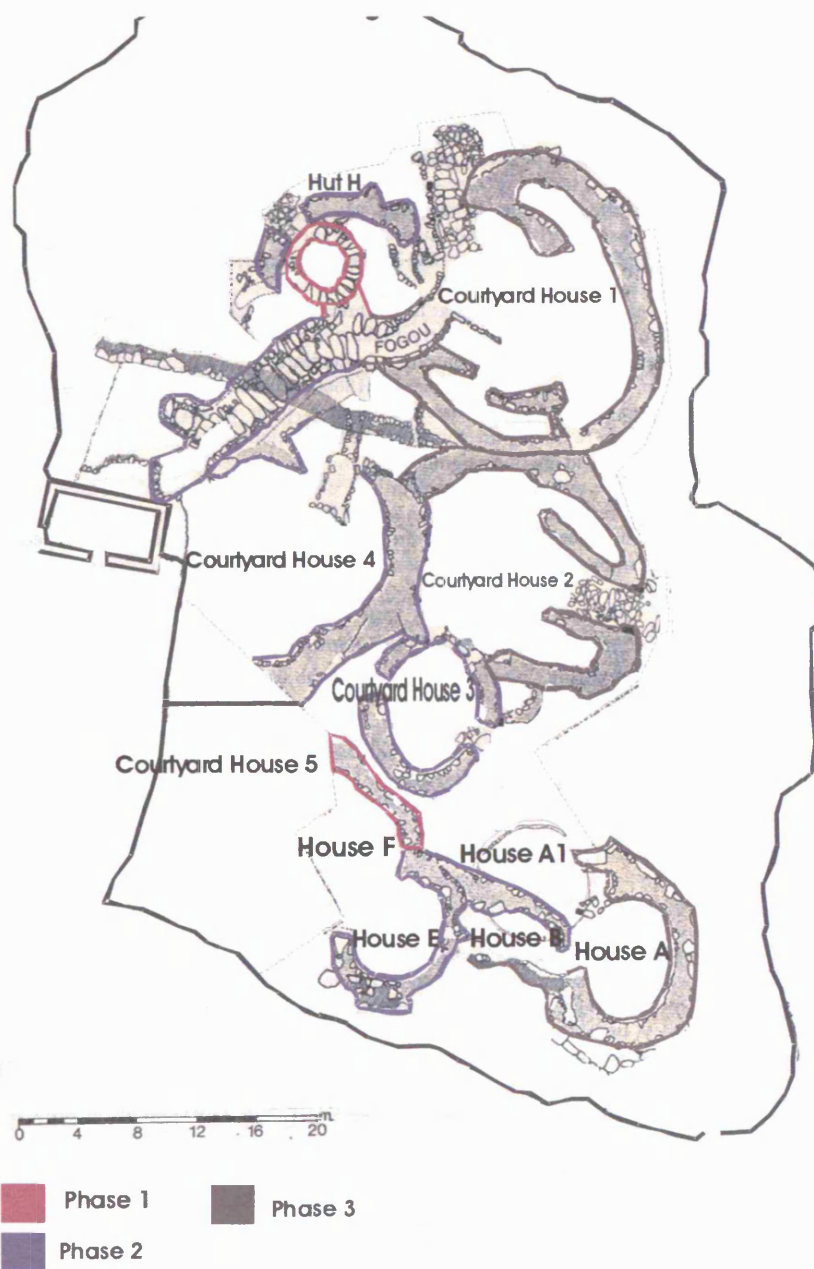
Plan of Carn Euny (from Christie 1978: 313), un-excavated areas have been outlined in red.

Carn Euny is a clear anomaly in terms of the combination of segmentation formats at sites with multiple courtyard house structures. It is the only site not to contain any dominant or closely related segmentation formats and none of the 'courtyard houses' have distinct round rooms. Indeed, the four courtyard house structures excavated at Carn Euny exhibit a distinct lack of 'rooms' beyond that of a courtyard. This apparent absence could be due in part to biases in excavation; the south western corner of the site remains unexcavated and may conceal additional

chambers which would change the overall formats of houses E/F and courtyard houses 4 and 5. In terms of the areas excavated however, the courtyard house structures revealed - whilst similar in the nature of their construction to courtyard house structures elsewhere - do appear anomalous in terms of their layout and integration.

In order to understand the way in which the visible structures interrelated and spatial movement and access controlled, at Carn Euny, a detailed breakdown of the sites history is necessary. The excavations (Christie 1978) between 1964 – 1972, do allow a broad structural chronology to be determined. For ease of comparison, the original terms used to classify the structures on site (e.g. 'House A1' or 'Courtyard house 5') have been maintained, although it is important to note early on that the characteristics used to distinguish 'houses' from courtyard houses' is not overly clear, and as a result, the exact nature of some of the earliest structures on site (e.g. courtyard house 5, house J etc) is more circumspect than their categorisation suggests.

The earliest features at Carn Euny (phase 1) were the round corbelled chamber and entrance passage of the fogou, tentatively dated to the fifth century BC by stamp decorated wares found beneath paving, in situ on the floor of the corbelled chamber. Charcoal and fragments of burnt bone were also found here. Excavation outside of the chamber showed that this structure would have been unable to have supported a corbelled roof, and so was either left open or roofed with timber, thatch and/or turf. A pit in the centre of the floor of the chamber, suitable for holding a central post adds weight to the latter suggestion. Additional activity from this phase included a gully, ash rich deposits and another sherd of stamp decorated pottery found beneath the later paved entrance to courtyard house 1. A radiocarbon date was produced from the ash rich soil, recalibrated to 660-720 – 420 cal. BC at 2 sigma (95%).



Plan of Carn Euny showing the evolution of the site (after Christie 1978: 313).

Phase 2 (c. 300 BC – 50 BC) marks the appearance of the earliest identified ‘settlement’ at Carn Euny. Houses A1 and F both span this phase and seem likely to have been occupied concurrently, at least for a while (Christie 1978:340-349). This is significant, because of their different methods of construction; A1 was timber framed with wattle or turf walls whilst F was double walled with a rab core, similar to the vast majority of other structures identified during excavation. This overlap in constructional style can also be seen, albeit at a significantly later date, at Goldherring. House A1 was overlain by house A at some point during Phase 3, but house F was much longer lived, continuing well in to the Roman period. The origins of houses B and E may also begin toward the end of Phase 2. Pottery belonging to Phase 2 was recovered in association with house B, the eastern wall of which abutted the pre-existing wall of house E. However, this pottery may in fact relate to Phase 2 activity from elsewhere; underlying house E, courtyard house 4, and associated with the remaining walls of house J which was later subsumed by courtyard house 1.

Pottery associated with Phase 2 to the north and west of the long passage produced a radiocarbon date in the second century BC. The long passage led out from the entrance passage of the round chamber, truncating the entrance passage in the process, and transforming the subterranean chamber into a fogou. The long passage would appear to have originally terminated against the natural rab at its south-western end, leaving access via the small ‘creep’ on the northern side, or by an opening on the southern side, closer to the entrance to the chamber. It is worth highlighting the spatial restrictions that would have controlled physical movement within these structures; the entrance passage and long passage had a maximum height of 1.37 metres 1.82 metres respectively, and the side ‘creep’ would have been extremely restrictive for adult use being only 0.60 metres wide and only a little greater in height. Phase 2 can thus be seen to relate to the expansion of settlement at Carn Euny and to the transformation of the round chamber, by making access to it a more difficult, physically demanding and controlled routine.

Phase 3 (*c.* 50 BC – AD 50) saw the continuation of activity within and/or construction of houses A, B, E and F and of courtyard houses 1, 2, 3 and 4. All were built primarily of double walls with a *rab* or earthen core. The latest occupation layers within the courtyard houses included areas of paved floor, predominantly within the entrance passages, but elsewhere and particularly in the earlier occupation levels belonging to both Phase 3 and Phase 2, floors of kaolinised white granite were common. This also featured beneath paving in the north western sector of the round chamber. This method of flooring was also present in structure F at Goldherring, comparable in date to Phase 3 at Carn Euny. The eastern entrance to the fogou, which linked to an opening in courtyard house 1 providing direct access to the underground structure, was also constructed during Phase 3. Phase 4 (*c.* AD 50 – 200) saw continuous occupation within houses A, B, E and F and courtyard houses 2 and 3, but activity within courtyard houses 1 and 4 appears to have diminished by this time and these structures may even have been abandoned.

One final structure is left to mention; hut 'H'. This structure appears to have been built over the top of the round chamber at some point during Phase 2 and has been suggested to have thus formed 'a house with a cellar' (Christie 1978:387). If so, one might envisage a two storey, semi subterranean structure not unlike some Scottish brochs (e.g. Armit 1990; Hingley 1996). However, this interpretation assumes a domestic function for this structure and in the absence of any conclusive artefactual remains relating to the nature and use of Hut H¹, a non-'domestic' role, in keeping with the round chamber, may be more probable.

The round chamber was one of the first elements to have been constructed at Carn Euny and has remained central to its development, with structures being built around it and in association with it. The long passage and eastern entrance formed

¹ No *rab* floor was present, but a mass of fist sized stones were found (potentially relating to a cobbled floor), alongside 'Iron Age pottery' (Christie 1978:382).

elaborations to the chamber, and the construction of a visible circular structure above the chamber should perhaps be considered as a similar stage of elaboration. The association of the fogou complex with courtyard house 1 and hut H, effectively controlling access to this structure, may also imply a household dominance over the site. If so, this could reflect a change in the social position of the complex. From the little excavated data from an increasing number of known fogous in Cornwall, the elements combined to form the example at Carn Euny is currently the earliest example within the region. This, combined with its setting during Phase 1 and early in Phase 2, might indicate that this fogou would originally have had a wider community significance and utility.

When considering the evidence for all structural forms at Carn Euny, Phase 3 (50 BC – AD 50) is the most densely built period, with the highest number of structures being used. Courtyard house 2 is used for the longest duration of all the courtyard houses, but the evidence indicates that other structures such as houses E and F were equally as long lived, although the exact form and relationship of these structures remains ambiguous. The ambiguous distinction made between the ‘houses’ and ‘courtyard houses’ within the report has already been raised as an issue for site interpretation, and it seems clear that with additional excavation in the south west corner in particular, the *nature* of structures on site may require further revision. It is the form of the courtyard house structures themselves that is most intriguing however. Although in the construction of their walls, their long entrance passages, paving and covered drains they are indicative of the courtyard house tradition, in form they are more unusual. Whilst long rooms are present in courtyard houses 1 and 2, they are less distinct than normal. The overall impression of this site of organic and evolving courtyard house forms and whilst in certain instances this may be due the subsequent use and destruction of areas of the site, made more complex due to incomplete excavation, where whole structures have been revealed (e.g. courtyard houses 1, 2 and 3), these do not represent a ‘classic’ courtyard house.

With this in mind it is significant, perhaps, that Carn Euny also displays the clearest evidence for earlier, pre-courtyard house occupation at a courtyard house site; from the fifth century BC (Christie 1978:385). Post holes and other features beneath courtyard house structures 1 and 2 are likely to represent earlier occupation, and House A1, again of non courtyard house design, also dates to the 'pre courtyard house phase' (although in accordance with the description above, this structure appears to have overlapped with 'houses' E, F and J, and potentially with courtyard house 3). The nature of the pre-courtyard house occupation at Carn Euny thus included structures which used the same methods of construction as courtyard houses, whilst the courtyard house structures themselves currently represent some of the earliest datable examples in the region. Considering the evolving nature of the structures; their under-developed segmentation and their contemporaneity with other 'simple' house forms; is it possible that Carn Euny represents a transitional courtyard house development? There is no evidence of the 'courtyardisation' of earlier stone structures at this site, but rather the early development of courtyard house structures in embryonic form. This may also help to explain their apparently anomalous segmentation formats.

The material assemblage from Carn Euny is the most recent, detailed and closely recorded courtyard house assemblage yet excavated, offering an unparalleled insight in to the nature of socio-economic practices on site. Twenty eight quern fragments are recorded from the excavations, most of which were found re-used within the walls of the structures on site. Only two of these were saddle querns, both made from a medium grained granite which was not immediately local. The remaining querns were rotary querns, the majority of which were made from a granite found locally, although three were made from greisen and one from fine grained granite. Both of these materials were not available within the immediately locale and the fine grained granite may have been quarried from the area around Castle-an-Dinas (Ludgvan), approximately # miles away (Christie 1978:388).

One of the earliest appearances of the rotary quern derives from the initial phase of occupation at Gussage All Saints, in the fifth century BC (Jones 1996:37). Saddle querns did continue to be used however; as late as the first century AD at Bagindon on for example (Moore, pers. comm.). In her database of sites of the Later Prehistoric period in northern and central Britain, Pope (2003) has identified five examples of rotary querns with associated and reliable radiocarbon dates, which place them comfortably within the second century BC, and potentially earlier. At Carn Euny, one saddle quern was in situ in the floor of the corbelled chamber. Another laid outside of the entrance to Hut H. These were obviously re-used, but their primary use could have been contemporary with both structures. The majority of quern fragments were found unstratified, and 'several were found built into walls' (Christie 1978:388). In light of the discussion above, the dominance of rotary querns at Carn Euny need not guard us against a Later Iron Age date for the inception of courtyard houses; although the example included within the floor of the corbelled chamber would seem unlikely to have been laid at the time of construction. Because of the white kaolinised floor underlying the paving in the corbelled chamber, and the recurrence of this type of flooring in Phase 2 contexts elsewhere on site, the re-deposition of the rotary quern could be tentatively attributed to Phase 3.

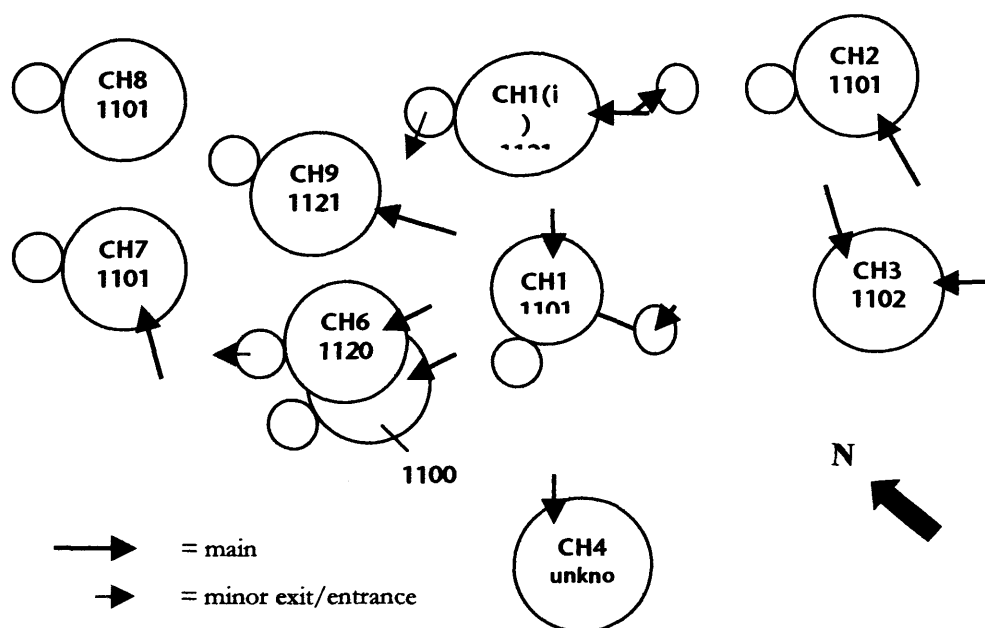
1.6 Chysauster

The segmentation formats at Chysauster have been ascertained from the SMR and the most recent plans (see Christie 1997). The house numbers referred to below relate to those recorded within the SMR and *not* those attributed by O'Neill Hencken (1933) or listed within the site guide. In most instances these sources agree about the segmentation formats of the courtyard house structures but in some instances the records differ between one another. The segmentation formats

identified at Chysauster are thus the result of my own judgements, having visited the site and considered the written material and plans available.

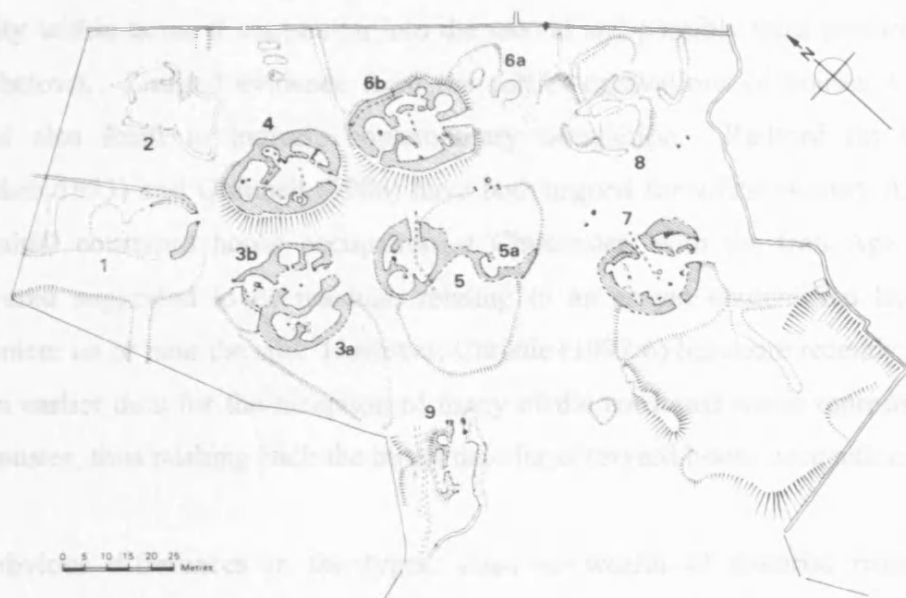
The segmentation format for courtyard house 1(i) used within this study, is different to that documented within the SMR (36008.1(i)). Courtyard house 1(i) is described within the SMR as having a single courtyard, two round rooms, a circular side chamber and a long room (1121), but having visited the site and examined the plans available, the south-western 'round room' of this structure has been re-categorised here as a side/circular chamber (making the segmentation format 1121), and included as such within the data set².

A stylised representation of the situation and entrance direction of courtyard houses at Chysauster



² For courtyard house 3, the combination of rooms given within the SMR record (providing a segmentation format of 1102), have been retained. In the plans for courtyard house 3, the second long room mentioned within the SMR is not very distinct. However, this structure has been heavily modified in the recent past, particularly from its use as a venue for preaching sermons in the 19th century, and as a result, its current appearance is likely to have changed much. On this basis, the description given within the SMR, taken from an earlier survey, has been taken to be the more reliable authority.

A simplified representation of the situation and entrance direction of courtyard houses at Chysauster is shown above. At first glance, the structures present at Chysauster appear to reflect a combination of fairly 'average' segmentation formats, all of which could represent domestic dwellings. However, upon further investigation the format, construction and situation of several of these structures also highlight some interesting characteristics which may provide reflections upon their resident households. The segmentation format 1101 is by far the most common at Chysauster, but these, along with the similar format 1102 are situated upon the periphery of this group of structures. These three structures (CH1(i), CH9 and CH6) together with CH1, appear to form a nucleus, sharing a common area around which the main entrances to these structures could be accessed.



Map of Chysauster, with houses numbered using O'Neill Hencken's categorisation (from Christie 1997: 10).

This could indicate several differing spatial relations at play. Could the cluster of courtyard house structures with the more elaborate segmentation formats reflect

larger, integrated or collective households of a different date for example? The assumption is that all the structures at Chysauster are contemporary, but only three have undergone recorded excavation; CH1, CH3 and CH6. The excavation of these structures indicated no distinct chronological differences however. Pottery from the interior of courtyard house 1 indicated occupation from the first century BC – beginning of the second century AD. Courtyard house 6 had been cleared of occupation debris in an earlier excavation, but the excavation by O'Neill Hencken in 1933 of a newly discovered side chamber also produced pottery from the first century BC and first century AD. The pottery from courtyard house 3 was also mostly of first century AD date, although some of the Roman wares could date to as late as the third century AD.

From the albeit fragmentary evidence therefore, courtyard houses 3, 5 and 7 all appear to have been occupied in the first century BC and first century AD, with activity within house 7 continuing into the second and possibly third centuries AD (see below). Limited evidence from the earlier excavations of houses 4 and 6 would also seem to indicate contemporary occupation. Radford (in O'Neill Hencken 1933) and Quinnell (1986) have both argued for a first century AD date for initial courtyard house occupation at Chysauster, with the Iron Age sherds recovered suggested to be residual, relating to an as yet unidentified Iron Age settlement on or near the site. However, Christie (1997:6) has more recently argued for an earlier date for the inception of many of the cordoned wares represented at Chysauster, thus pushing back the initial date for courtyard house occupation.

No obvious differences in the types, class or wealth of material from these structures was indicated in the excavated evidence. Although the segmentation formats of Courtyard houses 1, 1(i), 6 and 9 are not unusual within the overall statistics, their situation close to one another, and apparently surrounded by more domestic segmentation formats, made a non-domestic, communal function a possibility. On the basis of the excavated evidence however, these structures do

appear to have contained material ‘typical’ of a domestic dwelling; although their position and size might still have made them a focus for occasional larger gatherings of the households nearby. Could these structures reflect the homes of larger, compositionally more complex typical household units? Or might the more complex structures at Chysauster have been used by certain sectors of the community (e.g. household elders) at specific times or for particular events?

In light of the uniformity of material assemblages shared between structures at Chysauster, the more complex courtyard house structures (CH1, CH1(i), CH9, CH6) would seem most likely to reflect the realisation of a resident households need or desire for space and spatial segmentation. In this respect, it is worth mentioning specific aspects of the construction of several structures at Chysauster. The northern courtyard house of structure 6 appears to have been added at a later date for example, with the wall of the northern round room abutting, but not bonded to, the round room to the south. This indicates a serious re-modelling of this structure which may have resulted from the growth of the household through birth, marriage, or perhaps even the inclusion of members of the extended family after the death of a significant family member. Unfortunately, the only dating evidence from this structure comes from the side room excavated by O’Neill Hencken and from residual material found in the spoil heaps of the 1928 excavation. The material kept from this earlier excavation appears to have been discarded and the remaining pieces cannot be attributed to any particular rooms, making it practically impossible to explore the phasing of this structure any further.

Courtyard houses 1 and 1(i) have externally accessed ‘huts’ or ‘cells’ attached to their outer walls. In the case of courtyard house 1, this hut was attached by a length of wall and had direct access to and from one of the landscaped terraces (generally described as ‘garden plots’ or ‘paddocks’). Although built as a separate event to the construction of courtyard house 1, the 23 sherds of pottery from this cell indicates contemporaneous use (first century BC – the end of the first century AD). In

addition the excavation of this cell recovered 3 water worn pebbles, a whet stone and a spindle whorl, all from on top of the rab floor. A stone lined hearth was also situated at the northern end of the cell, which measured *c.* 3 metres wide and *c.* 5.48 metres in length, giving an approximate floor area of 13.15 m².

The existence of the stone lined hearth in the ancillary chamber of courtyard house 1 is important, particularly when the only evidence for a fire within the main structure was a small patch of charcoal in the centre of the floor of the round room. Could this attached cell, in close proximity to the 'garden terrace', have been used for food preparation, to source the main structure? If so, this may imply a particular use or purpose attributed to courtyard house 1, making it distinct from the rest. It could be argued for example, that the main courtyard house structure - with a central position within the village and separate ancillary structures - was an 'elite' residence, being served from beyond its immediate boundaries. The lack of any distinctions in the size of this structure, or in its material assemblage, would suggest against this however. Alternatively it is perhaps more plausible, particularly in light of the absence of any obvious hearth, that this centrally located courtyard house structure may only have been used temporarily or specific communal purposes such as groups meetings.

Excavations within the interior of courtyard house 3 showed that this structure had suffered a great deal of disturbance and alteration, post abandonment. Much of this may relate to its known use as a location for sermons during the nineteenth century; the niche in the back wall of the round room is known to have been used as a pulpit for example. Similar preaching is also known to have taken place at Chun Castle. The entrance to the south of the structure is a modern addition; but the blocked entrance to the east, and the northern entrance are both thought to be original.

The round room of courtyard house 3 contained two stone lined hearths, one of which contained a layer of sherds within a burnt rab deposit. Later Iron Age and

Roman sherds of pottery within the lowest layers of this hearth indicate a *c.* first century AD date for its construction. Similar hearths, with pottery-sherd linings have also been found at Porthmeor. In this case these structures were dated to the third century? phases of occupation and similar Roman pottery from the upper levels of the Chysauster examples suggests a broadly contemporary date for these features.

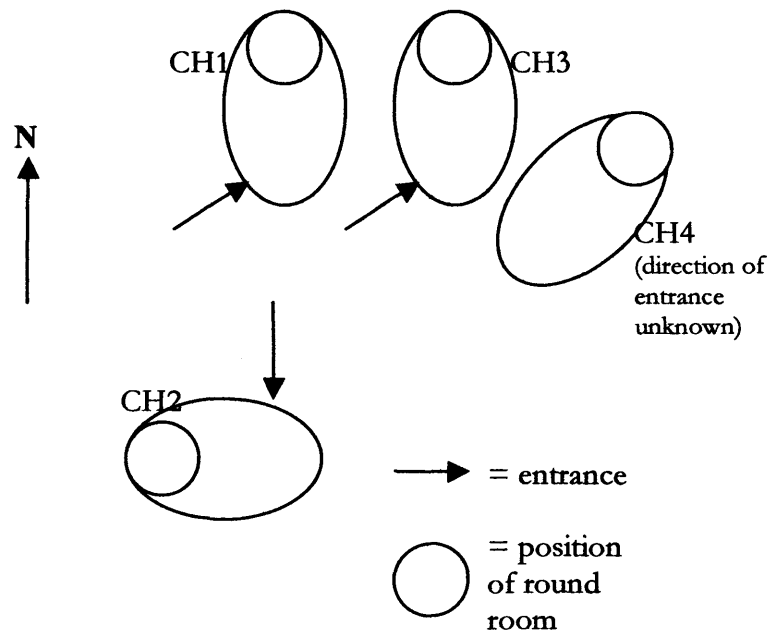
Long rooms and circular/oval side chambers are both present within the segmentation formats at Chysauster, but feature together rarely; in courtyard house 9 (1121) and courtyard house 1(i) (1121). Once again, these structures are two of the three more complex courtyard houses at Chysauster, and are located centrally within the 'village'. This may imply a direct preference, made at household level, between circular or long rooms, or may imply differential activities taking place within them. In courtyard house 9, there appears to be an interesting and possibly significant shift in the organisation of space, with the division of the long room using a separating wall. This adaptation gave courtyard house 9 a similar layout to that of courtyard house 6 (north). Both long rooms of courtyard house 1 at Carn Euny were also partitioned at a later date, as was the long room of courtyard 3 at Boswarva.

1.7 Croftoe

Although Croftoe was partially excavated by Marsden in 1922, no plan of the site or record of the site assemblage are available. The present courtyard houses have associated garden plots and paddocks, and are contained within an enclosure. In the absence of any clear evidence for abandonment noted within the excavation records, it is assumed that all four structures were at least extant (even if not in active use) for the duration of occupation, and from evidence elsewhere occupation seems likely to have been broadly contemporary.

A single free standing hut circle is also contained within the Croftoe enclosure. The potential for this to represent occupation prior to the courtyard house phases on site is supported by the observation that the courtyard house walls of courtyard house 1 are secondary to the round room which would have also once stood in isolation. The dimensions of this 'round room' (8.4m x 7m), give an internal area of 47.04 m², closely comparable with modest Iron Age roundhouse examples at Gurnards Head, Bodrifty, Chun Castle and Carn Brea.

Courtyard house 3 and courtyard house 4 (1102 and 1111) are situated alongside one another. A survey in 1986 recorded these as one house, split into two, but subsequent investigation has found no internal connection between these structures and their apparent 'attachment' may be due to slumping, rather than any original design (see SMR 30425.3). The proximity of both structures might imply a direct relationship however; possibly an extended family. A similar possibility might also be inferred from the expansion of courtyard house 3 at Chysauster.



A stylised representation of the situation and entrance direction of courtyard houses at Croftoe.

The proximity of the segmentation formats at Croftoe to the 'dominant' segmentation formats previously identified suggests that each of these structures represent 'typical' household units. The third long room of courtyard house 1 is attached to the outside of the house; once again reflecting the gradual accretion of rooms over time. This may imply expanding household numbers and a subsequent need for space/storage, or, if these long rooms were providing a role to the site as a whole, an expanding community. Additionally, the close proximity and possible attachment of courtyard house 3 and courtyard house 4 might imply the expansion of a household or, if both were indeed built together, an emphasis upon the physical and spatial recognition and reaffirmation of extended household alliances. Either way, initial impressions of Croftoe would seem to indicate the presence of three or four households (possibly although not necessarily comprising a single extended household unit), who manipulated their house forms over time in accordance with a growing need or desire for enclosed space.

Although these structural adaptations at household level may indicate a degree of independence at the scale of the household, the enclosed community of Croftoe seem likely to have also identified as a single entity in activities such as the construction of additional courtyard house rooms or the working of garden plots. A community identity may have also been reiterated in the ideology of spatial relationships on site; courtyard house 1 and courtyard house 3 both have their entrance to the south west and their round room to the north, whilst courtyard house 2 has its entrance to the north which, because of its situation, allows access in from and out to, the same central area used for access by courtyard house 1 and courtyard house 3.

Aside from a single example of an 1111 format, long rooms are also favoured over circular/oval side chambers (1101, 1102, 1103). This preference is most distinct at Croftoe, although may also be a feature of other sites such as Treen (1121, 2112,

1102). This latter observation once again raises the issue of room function at a site level; the concurrence of long rooms seemingly implying a generic acceptance in terms of preference, use, or both, of the 'long' room.

1.8 Nanjulian

At Nanjulian, with the exception of the two structures with dominant format 1101, circular/oval rooms are favoured over long rooms within courtyard house formats. Although courtyard house 3 (1120) closely resembles the 'standard' format of courtyard house 4 and courtyard house 5 (1101), the segmentation format of courtyard house 1 (2030) is far from regular and immediately raises the possibility of a different role or function to that of a 'typical' household residence. This notion is supported by the context of courtyard house 1 on site; bounded by a substantial curved bank which also contained several small enclosures or 'paddocks'. Outside of this enclosure, stand the three other courtyard houses. Of these, courtyard house 4 and courtyard house 5 display evidence of courtyardisation. This process of courtyardisation indicates that an earlier, 'open' Iron Age settlement preceded the courtyard house phase of occupation at Nanjulian, the structures of which were subsumed by and incorporated within the courtyard house structures.

Courtyard house 1 shows no such signs of 'courtyardisation', and its unusual segmentation format and enclosed isolation raise a number of questions. It may be that courtyard house 1 represents a different period of occupation at Nanjulian; the consolidation of a diminishing courtyard house community for example. Alternatively, this enclosed courtyard house could be interpreted as the residence of the head or leader of the social group. Equally plausible however is the possibility that this structure performed a supportive role to the households resident within the 'typical' courtyard house structures beyond. The two courtyards of courtyard house 1 (2030) might imply an emphasis upon communal gathering, or craft working; the

side rooms, potential storage for foodstuffs or the protection of livestock, the latter of which could also have been contained within the external enclosures mentioned within the bounded site as a whole.

1.9 Porthmeor

Four, possibly five, courtyard house structures comprise the settlement at Porthmeor. Two of these underwent total excavation by Hirst in 1933-35 (Hirst 1937), and due to damage on site, these are the only two for which segmentation formats can be discerned with any certainty. The site as it currently stands comprises of an oval stone built enclosure containing three courtyard house structures at least two single circular structures, with a fourth courtyard house, two circular structures and a possible 'above ground fogou' outside of the enclosure. A fifth possible courtyard house is situated slightly further away, at Upper Porthmeor. The site is situated close to several barrows at Treen.

From the excavated evidence Hirst concluded that Porthmeor comprised of an open settlement of scatted circular structures during the Late Iron Age. As is the case elsewhere, the courtyard houses at Porthmeor continued in use well into the fourth century AD, but their inception date, around the first half of the second century AD at the latest, makes the earliest phases comparable for study.

The enclosure within which two of the courtyard houses are situated appears to have been built at the same time as these structures; the courtyard houses being designed to fit where they met the wall. Because of the complexity of this site, only the early features and material associated with second century occupation and earlier, is discussed in detail. Courtyard houses 1 (1101) and 2 (1112) are situated at alternate ends of the enclosure, courtyard house 1 to the east, and courtyard house 2 to the west. Each structure is also positioned close to separate entranceways

through the enclosure wall, which give access to the area immediately outside of the main entrance of each courtyard house.

Within the enclosure, the land was artificially levelled into four terraces. Courtyard house one dominates the first, lowest terrace. A number of additional features cluster around the outside of this courtyard house, some of which were investigated by Hirst in the 1933-35 seasons. Directly outside of the courtyard house is a paved area which, as has been mentioned above, extends to an entrance through the wall of the enclosure. This paving is encircled by a number of other apparent structures; Hut 1 and Hut 3 to the south east of the paved area, both of which are unexcavated and may or may not combine to form another courtyard house structure; Hut 2, which was excavated and situated to the west of the paved area and just outside of the courtyard house entrance; and Hut circle 1 which was excavated and situated next to Hut 1 and opposite Hut 2. In addition, this area of paving extended to the north, forming a short avenue, at the end of which was a paved circular depression, which may have been lined around the edge with orthostats. This could have serviced as a dew pond, for the collection of water for livestock (Jeremy Taylor pers. comm.).

The situation of courtyard house 1 is mirrored in part by courtyard house two. Courtyard house 2 also has an external area outside of its entrance which is paved. As with courtyard house 1, this area is also directly accessed by an entrance, this time the main entrance in to the enclosure. A number of structures once again surround this central paved area. These remain unexcavated, although several are again postulated as combining to make an additional courtyard house structure. If this was so, the overall layout of the area within the enclosure develops a slightly more ordered appearance; subdivided in to four terraces, controlled by *two* household complexes, each of which comprised of *two* courtyard houses with additional structures which surrounded a common central area, accessed by its own enclosure entrance. As such, several levels of unity and/or autonomy can be

suggested; a family or member of a family occupying a courtyard house, an extended familial unit or extended group who shared a structural complex and common open area and perhaps the use and jobs associated with the structures around it; and the group of those inhabitants of the enclosure as a whole; who lived within the boundary of the settlement and may have shared some or all of the tasks and resources associated with the terraces.

The earliest occupational evidence from both courtyard houses 1 and 2 at Porthmeor dates to the second century BC, but certain rooms, now incorporated within these structures, as well as certain individual hut circles, do appear to have had their origins in the Later Iron Age. In courtyard house 1, the long room once again appears to have been partitioned at its southern end by a granite block, creating a small alcove. A kink in the alignment of the outer wall and a tilt in the inner walling of the long room caused Hirst to suggest that the long room was added to the round room, and the same pattern is observable with courtyard house 2. Whether this occurred over a period of time, reflecting the process of accretion, or simply reflects two stages of a contemporary build, is unclear.

The round room of courtyard house 1 is raised. The lower of the two occupation levels recovered from this room dates to the initial occupation of the courtyard house and contained two hearths; one, roughly circular and lined with stone on its sides and base, and one a more ephemeral patch of surface burning. The back and sides of the former hearth were burnt, but the stone on the base was not, indicating that it may have been replaced prior to the raising of the floor and the start of the second phase of occupation. Burnt matter and sherds of pottery also surrounded this stone hearth. Two copper coins were also recovered from the primary occupation layer, only one of which was identifiable, of Marcus Aurelius minted 174-175 AD. Incorporated within the material used to raise the floor of the round room, was a saddle quern of almost mint condition.

The outer wall of courtyard house 2 shows that the width of the courtyard was enlarged on two occasions. As well as the addition of the long room to the courtyard house, the 'outer left room' also appears to have been added in a separate construction event. Two hearths were also found on the single occupation floor of the round room. The majority of finds place occupation to the third and fourth centuries AD. However, as in courtyard house 1, the paving surrounding the side door of the round room in courtyard house 2 also contained a saddle quern of perfect condition.

The enclosure of the structures above raises questions over the role, context and chronology of those structures that once stood outside of the enclosure. Could these relate to courtyard house occupation, prior to the third and fourth century occupation within the enclosure? If this was not the case, and the structures were contemporary, why were only two (or potentially four) enclosed? A single unexcavated courtyard house, now lies to the south of the enclosure but this is thought to have been one of many courtyard house structures that originally stood outside of the enclosure (Hirst 1937:5).

1.10 Treen

The segmentation formats at Treen (1121, 1102, 2112) have been deduced from the information given within the SMR. The most elaborate structure, courtyard house 2, is described as consisting of 'two semi detached units', each with its own courtyard and entrance. The northern unit has a long room to the north of the courtyard and a round room; the southern unit mirrors this layout with a long room to the south and a raised round room which has a rear access to an external 'garden plot'. The entrances to both units are orientated to the west, making this overall layout of this structure very similar to courtyard house 6 at Chysauster. Unfortunately, no phasing was visible in the construction of this courtyard house

although, as at Chysauster, the attachment of these two units and their direct mirroring of layout may once again indicate the addition of a second unit in accordance with an extension to the household.

1.11 Trevean

The three courtyard houses at Trevean appear to be ‘typical’ in their segmentation formats (1111, 1101, 1100), although courtyard house 2 (1111) and courtyard house 3 (1100) both have single circular stone structures attached, which are accessed externally.

Courtyard house 1 is smaller than the other two courtyard houses, and has an entrance facing north east. The round room of this structure is also situated to the east, adjacent to the entrance (rather than opposite, as is more frequently the case in courtyard houses). In contrast, courtyard houses 2 and 3 both have south facing entrances; but once again the round room is not situated opposite the entrance. The round room of courtyard house 2 is not detailed, but a long room is situated to the north, directly opposite the entrance, and the round room of courtyard house 3 is to the right of the entrance, in the west. The consistency with which these structures ignore the common layout of a courtyard house appears to be a unifying trait at the site, indicating quite specific spatial relations operating at a site level; and in contrast to those applied at courtyard houses elsewhere. As has already been discussed within Chapter 5, the deviations to the standard courtyard house layout at Trevean may indicate specific differences in the structuring of daily life at this site, and/or the choice or household perception of a more common approach to spatial relations, at site level.

The single circular structures or ‘roundhouses’ attached to courtyard houses 2 and 3 may once again indicate Iron Age occupation at Trevean, prior to the courtyard

house phase(s). If so, these structures would not reflect the process of 'courtyardisation', but rather the potential reuse or re-designation of extant circular structure, by attaching it on to the outside of a courtyard house. If these single circular structures were indeed earlier than the courtyard houses at Trevean, it is interesting to ask why they were simply attached to the outside of a new courtyard house structure, as opposed to being incorporated into a courtyard house structure, as is the case elsewhere. In this instance, the external access to these structures may have been of value; implying their use for storage or activities which were preferred outside of the main courtyard house.

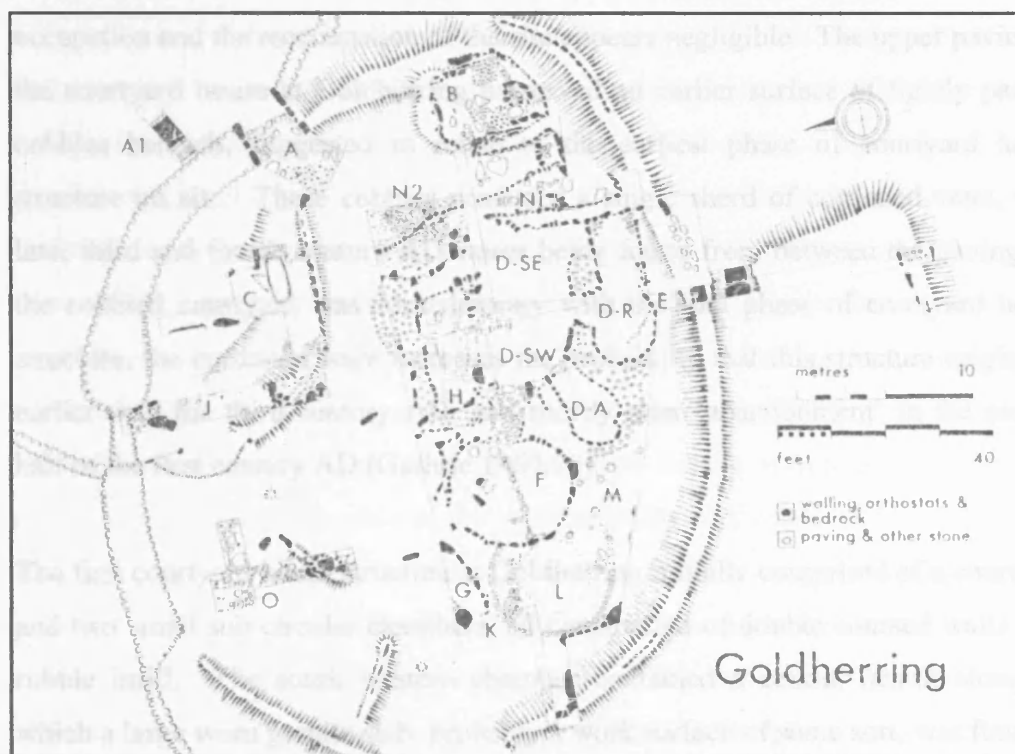
2.0 Excavated Sites (single structures)

Only five courtyard sites have undergone published excavation. Three of these sites; Chysauster, Carn Euny and Porthmeor have been discussed above, along with information within the SMR relating to the unpublished, often antiquarian excavations of other sites such as Croftoe and Bosporthennis. The excavations at Goldherring and Mulfra Vean have yet to be discussed however as neither has been included as a multiple 'courtyard house site'. Goldherring is a single courtyard house within an enclosure, and Mulfra Vean only has one courtyard house structure with a discernable segmentation format.

2.1 Goldherring

The single courtyard house at Goldherring was enclosed by an oval bank and outer ditch. This enclosure dates to the primary phase of occupation (*c.* first century BC – early first century AD) and contained a single turf and post built hut to the west of the interior with a smooth rammed kaolin floor. Further patches of this flooring may indicate several other huts belonging to this phase, obliterated by later

structures. A number of additional gullies, post holes and pits were also identified as belonging to this primary occupation. Three of these pits contained a 'slimy clay' (Guthrie 1969:19-20), underlain by gravel and sand, and the deepest contained the head of a dolphin brooch (c. AD 41-68) at the base. These pits are suggested to have been used for pottery production. A dark layer (layer 1) containing a fairly high number of pottery sherds, mostly cordoned wares, appears to have sealed all the features of primary occupation.



Plan of Goldherring (from Guthrie 1969: 9).

From this evidence, the end of phase 1 activity and the temporary abandonment of the site is suggested in the early first century AD; a gradual demise and decay rather than purposeful destruction, which lasted until the re-occupation of the site in the third century AD (the first phase of courtyard house occupation). By the end of phase 1 occupation, the rock cut enclosure ditch and well were also deliberately in

filled. In light of more recent archaeological discoveries, and reviews of specific other sites from Cornwall and Devon (Gold Park: Gibson 1992; Callestick: Jones 1998-9; Trethellan Farm: Nowakowski 1991; Nowakowski 2001; Harlyn Bay: Whimster 1977) it could be argued that, rather than the piecemeal demise and decay of the site, the nature of abandonment at Goldherring may reflect a deliberate attempt to 'close down' the primary occupation of the site, prior to its reuse.

In addition, the amount of time that elapsed between abandonment of initial occupation and the reoccupation of the site appears negligible. The upper paving of the courtyard house at Goldherring preserved an earlier surface of tightly packed cobbles beneath, suggested to relate to the earliest phase of courtyard house structure on site. These cobbles produced a single sherd of cordoned ware, with later third and fourth century AD wares being found from between the paving. If the cobbled courtyard was contemporary with the first phase of courtyard house structure, the cordoned ware increases the probability that this structure originated earlier than the third century AD, and shortly after 'abandonment' in the second half of the first century AD (Guthrie 1969:10).

The first courtyard house structure at Goldherring initially comprised of a courtyard and two small sub circular chambers, all constructed of double coursed walls with rubble infill. The south western chamber contained a central hearth alongside which a large worn granite slab, probably a work surface of some sort, was found *in situ*. The second, southern chamber contained a kerbed hearth and several other thinner hearth spreads. One of these passed beneath the wall of the round room, indicating that this chamber may have been the last structure of this phase to have been built. A second phase to the courtyard house occupation, during the second half of the fourth century AD was marked by a rectangular extension to the southern chamber and the construction of an oval room to the west of the courtyard and a long room to the north. The rectangular extension and oval room both appear to have been used for small scale production; the former containing a hearth with a

nine inch deep conical hole filled with white siliceous clay and a scatter of iron slag, associated with iron working, and the latter containing a grain parching oven and carbonised grains. The oval hut, and possibly the long room were also constructed differently, with turf walls situated upon a single row of foundation stones and lean-to roofs supported by internal posts.

The courtyard house structure by this time would have looked very different to the other courtyard houses of the region, largely because of its piecemeal construction; with a mixture of circular, oval and rectangular rooms of both stone and turf walls and opposing roofs. The co-existence of these physically and visually different forms of construction is reminiscent of similar combinations at Carn Euny, albeit much earlier, in the second or first centuries BC. In one way, this combination of building styles distinguishes Goldherring from the other contemporary courtyard house structures of West Penwith, leading to its comparison with the hut settlements of northern Wales (Guthrie 1969:23; Hogg 1957). However, in its clearly piecemeal construction and gradual accretion of rooms, Goldherring is portraying a lifecycle characteristic of many other courtyard houses within the region. The physical and visual expression of this process in the very fabric of the Goldherring structure is a feature of other stone built courtyard houses that, we should consider, is likely to have been *as visually recognisable* to the resident communities of the time. Much like building archaeologists today, recent remodelling of stone or brick structures, however faithful, is normally identifiable to the eye.

2.2 Mulfra Vean

Partial excavation was undertaken of one of the courtyard houses at Mulfra Vean in 1954 (Thomas 1963). Initial observation identified a sub circular courtyard house with a west facing entrance, round room to the east and probable long room to the south. Half of the round room was excavated with an additional trench through the

entranceway to the round room, a second trench transecting the long room, and a third trench transecting the northern wall of the courtyard. No plans of this excavation now exist.

Aside from a single sherd from a samian bowl from late first century/early second century AD Gaul, the pottery recovered consisted of cordoned wares and local coarse wares of jar and bowl forms. These were initially dated to the first century AD with probable continuation into the second century AD, although the presence of pre-conquest cordoned wares at other courtyard house sites such as Carn Euny and Chysauster could feasibly push some of this material back in to the first century BC. The only other artefacts to be recovered from the structure were a number of beach pebbles, most of which showed some signs of indefinite use (Thomas 1963:24). No evidence of structural phasing was recorded during the excavations and the death of the director shortly after the excavation meant that the publication notes from this site are based purely upon the observations of Professor Charles Thomas in the final week of excavation, and the catalogue of finds.

Appendix 5

Courtyard House Structures

Site name	Courtyard area	Round room area	Circular/oval room area	Long room area	Total Internal Area	Total External Area
Bosigran CH1	55.39	58.8	7.07	12.76	134.02	228.63
Bosigran CH2	no data	no data	1) 28.26 2) 11.34	8.4	48	448
Bosigran CH3						307.2
Bosigran CH east	38.69	36	24.62	12.82	112.12	199.71
Bosiliack	no data	28.8	14.08	28.8	71.68	
Bosporthennis CH1	68	23.4	0	18.7	110.1	197.01
Bosporthennis CH2	data incomplete (see sheet)					
Bosporthennis CH3	data incomplete (see sheet)					
Bosporthennis CH6	data incomplete (see sheet)					
Bosporthennis CH4	data incomplete (see sheet)					
Bosporthennis CH4.1	data incomplete (see sheet)					
Bosulow Trehyllys CH1						302.4
Bosulow Trehyllys CH2						360
Bosulow Trehyllys CH3						324
Bosulow Trehyllys CH4						211.2
Boswarva CH1	no data					
Boswarva CH2						364.8
Boswarva CH4						614.4
Boswarva CH5						464
Botrea CH1						537.6
Carn Euny CH1					122.16	
Carn Euny CH2*					144.91	
Carn Euny CH3*					54.32	
Carn Euny CH4*					127.87	
Carnaquidden						672

Carne	105	50.24	46.8	38.7	240.74	363.27
Chycandra	200.96	50.24	(detached hut circle present: 50.24)	0	251.2	376.08
Chykembro						285.6
Chysauster CH4						324
Chysauster CH8						252
Chysauster CH9						410.4
Croftoe CH1	50.4	47.04	0	1) 8.32 2) 24.00	129.76	223.04
Croftoe CH2	67.2	27.44	0	10.26	102.85	256
Croftoe CH3	64	44.64	0	1) 40.85 2) 10.56	160.05	262.26
Croftoe CH4	43.2	35.84	13.32	12.32	104.68	218.4
Foage						143.07
Greenburrow	89.09	59.81	8.62	0	157.52	259
Higher Trevowahan						177.63
Mulfra Vean CH1						172.8
Mulfra Vean CH2						440
Mulfra Vean CH3						272
Mulfra Vean CH5						374.4
Porthmeor CH21						211.2
Porthmeor CH22						314
Porthmeor CH23						211.2
Porthmeor CH30727						268.8
Treen CH1						314
Treen CH2						440
Treen CH3						285.6
Treveal						490.63
Trevean CH1						216
Trevean CH2						353.6
Trevean CH3						197.6
Trewern						416
Try						281.53

**Non Courtyard House
Structures**

Site	Total internal area sqm	Total external area sqm	total area of site	total area excavated
Bodrifty				
Bodrifty B	6.24	11.18		
Bodrifty CII (external*)	38.52	79.25		
Bodrifty CI				
Bodrifty F		16.41		
Bodrifty E	45.58	79.41		
Bodrifty G		35.28		
Bodrifty H		32.15		
Bodrifty L		23.63		
Bodrifty M*	21.23	40.69		
Bodrifty A1		54.74		
Bodrifty TOTAL		372.74	12140.58	
Bodrifty TOTAL (Phase 2)		421.94		
 St Mawgan in Pyder				total area excavated*
MV W (external*)	35.23	61.27		
MV A*	36.9	68		
MV V		23.63		
MV D		45.58		
MV E		45.58		
MV X*		6.34		
MV Y		74.65		
St Mawgan in Pyder TOTAL		325.05		1555.87
 Penhale				
Structure 1				500

Castle Dore			total area of site	total area excavated*
Castle Dore TOTAL (Period 1)				1089.5
Castle Dore TOTAL (Period 2)				1194
			total area of site	total area excavated
Killibury				
Structure 1	63.59		7,500	210
Bodwen			total area of site*	total area excavated*
No structures			2,374	46
Callestick	Total internal area	Total external area		
structure 1	(sqm)	(sqm)		
		54.64	N/A	N/A
Goldherring			total area of site*	total area excavated*
D-SW and D-SE (courtyard)*		81		
D-A (side chamber)*		12		
D-R (extended long room)*		27		
Entrance passage to F*		3		
F (round room)*		30.8		
L		30.8		

Goldherring TOTAL (Phase 1)	30.8	960	561.1
Goldherring TOTAL (Phase 2)	153.8	960	561.1

	Total internal area (sqm)	Total external area (sqm)	Total area of site	Total area excavated*
Carn Brea				
HC 1	50.24	78.5		
HC2	38.47	63.59		
HC3	38.47	63.59		
HC4	28.26	50.24		
HC5	38.47	78.5		
HC6	28.26	72		
HC7	63.59	113.03		
HC8	19.63	50.24		
HC9	19.63	50.24		
HC10	38.47	63.59		
HC11	38.47	78.5		
Carn Brea TOTAL	401.96	762.02	80937.2	982.25

	Total external area (sqm)*		
Threemilestone			
structure 8	28.26		
structure 12	19.63		
structure 13	38.47		
Threemilestone TOTAL	86.36	3000	2000

	Total internal area (sqm)	Total external area (sqm)	Total area of site	Total area excavated*
The Rumps				

Possible middle rampart hut?
(fig 1)

indiscernable

Two areas of apparent
occupation
midden' area

indiscernable

indiscernable

HC beind innermost rampart

32.15

HP1

HP2

HP3

HP4

HP5

HP6

IA pottery

IA pottery

Total internal area

Total external area

Total area of site*

Total excavated area*

Hayne Lane

RH 459 (with porch)

41.3

RH 458 (with porch)

69.89

Hayne Lane TOTAL

111.19

2916

2268

Langland Lane

Structure 1?

122.66

4623

Total internal area*

Total external area*

Total area of site

Total excavated area*

Harlyn Bay

Structure

63.585

78.5

?

53.85

Total internal area

Total external area

Total area of site*

Total excavated area*

Trevelgue

Structure 1

153.86

243.1616

74250

1485

3 or 4 structures excavated in

total

Castle Gotha	Total internal area*	Total external area*	Total area of site	Total excavated area*
Structure 1 (south)*	70.84	86.54	4,126	387.75
Rectangular structure (south)	Too late?			
Structure TH (NE -minimum; area uncovered - total area impossible to approximate)		18.49		
Structure TJ (minimum approx. area)		4.096		
Oval Structure (from dimensions given)		55.68		
Total		164.806	4,126	387.75
Gurnards Head	Total Internal area*	Total External Area	Total area of site*	Total excavated area
NB – more structures from SMR!!!! To do				
Hut A (external dimensions given in text)	16.61	23.77	38,080	
Hut B	29.76	61.2		
Hut C	14.28	41.6		
11		30.17		
12		18.5		
14		56.71		
15		78.5		
18		23.75		
2		50.24		
21		113.04		
23		14.4		
24		28.28		
Total		540.16	38,080	

Shortlanesend (NB external area an estimate; not all uncovered)	Total Internal area	Total External Area	Total area of site	Total excavated area
	78.5		2500	190
Trevinnick	Total internal area	Total External area	Total area of site	Total exavated area*
Structure 1	40.877		6243.08	109.01
Structure 2 **	40.877			
	81.754		6243.08	109.01
Porthmeor	Total Internal area	Total external area*	Total area of site	Total excataed area
CH1		211.1		
CH2		314		
CH23		211.2		
HC1		46.45		
H6/7		156.77		
H5		22.33		
H8		22.33		
Total		984.18	4046.85	
Trevisker	Total internal area		Total area of site	Total excavated area
House 1	94.29		12,140	1000
House 2	122.65			
House 3 (unknown)				
TOTAL	216.94		12,140	1000
Trethurgy	Total internal area	Total external area	Total area of site	Total excavated area
Period 5 stage 1 (175-210)				
Z1	89.6			
T2	81.6			
D1	35.24			

X1	64		
E1	7.2		
A1	70.4		
	348.04	2,000	1950
Q2 cannot be gauged			
Period 5 stage 1 (150-175)			
A1	70.4		
Z1	89.6		
T1	86.4		
E1	7.2		
X1	64		
	317.6	2,000	1950
Q1 cannot be gauged			

Appendix 6

The segmentation formats of courtyard house structures in Cornwall, with summaries from the SMR, binary numbers relate to the number of rooms in the sequence:

Courtyard, Round room, Circular/Oval side room, Long room

Site	Courtyard	Round room	Circular/Oval extra room	Long room	Fogou	overall format
Boddinar Crellas	No data					
Bodrifty	No data					
Boscreege	No data					
Bosigran CH1	1	1	1	1		1111
Bosigran CH2	1	1	2	1 (possibly 2)		1121
Bosigran CH3	No data					
Bosigran CH4	No data					
Bosigran CHEast	1	1	1	1		1111
Bosiliack CH1	1	1	1	1		1111
Bosporthenis CH1	1	1	0	1		1101
Bosporthenis CH2 (fragment)	1	1	0	1		1101

Bosporthennis CH3 (fragment)	1	0	2	0		Unknown
Bosprthennis CH6 (fragment)	1	1	1	0		Unknown
Bosporthennis CH4 (fragment)						Unknown
Bosporthennis CH4.1 (fragment)	1	1	0	0		1100
Bosulow Trehyllys CH1	1	2	1	1		1211
Bosulow Trehyllys CH2	1	2	2	2		1222
Bosulow Trehyllys CH3	2	2	4	1		2140 (2241 in SMF format rectified w. the use of a site pl and visit)
Bosulow Trehyllys CH4	1	1	0	1	Yes	1101
Site	Courtyard	Round room	Circular/Oval room	Long room	Fogou	
Boswarva CH1 (sw; not se)	1	1	2	1		1121
Boswarva CH2	1	1	0	1		1101
Boswarva CH4	1	1	1	1		1111

Boswarva CH3	1	1	1	1 (possibly 2)		1111
Boswednack	No data					
Botrea CH1	1	1	0	2		1102
Botrea CH2	No data					
	Courtyard	Round room	Circular/Oval room	Long room	Fogou	
Carn Euny CH1	1	0	0	2	Yes	1002
Carn Euny CH2	1	0	0	2		1002
Carn Euny CH3	1	0	0	(possibly 1)		1000
Carn Euny CH4	1	0	(possibly 1)	0		1000
Carnaquidden	1	1	(possibly 1)	1		1101
Carne	1	1	1	1		1111
Carnelloe	No data					
Chycandra	1	1	(Possibly 1)	0		1100
Chykembro	1	1 (possibly 2)	1	1		1111
Chysauster	1	1	0	1	Yes	1101

CH1						
Chysauster CH2	1	1	0	1		1101
Chysauster CH3	1	1	0	2		1102
Chysauster CH4 (fragment)	1	1	?	?		Unknown
Chysauster CH6 (south)	1	1	0	0		1100
Chysauster CH6 (north)	1	1	2	0		1120
Chysauster CH7	1	1	0	1		1101
Chysauster CH8	1	1	0	1		1101
Chysauster CH9	1	1	2	1		1121
Chysauster CH1(i)	1	1	2	1		1211 in SMR record, but revised with reference to plan.
Crankan CH1 (fragment)	1	1	?	?		Unknown
Crankan CH2 (fragment)	1	?	?	?		Unknown
Croftoe CH1	1	1	0	3		1103
Croftoe CH2	1	1	0	1		1101
Croftoe CH3	1	1	0	2		1102
Croftoe CH4	1	1	1	1		1111
Foage CH1 (fragment)	1	1	?	?		Unknown
Goldherring	1	1	1	2		1112

Greenburrow	1	1	1	0		1110
Higher Town	No data					
Higher Trevowahan	No data					
	Courtyard	Round room	Circular/oval room	Long room	Fogou	
Mulfra Vean CH1 (fragment)	No data					
Mulfra Vean CH2	1	1	2	0		1120
Mulfra Vean CH3 (fragment)	1	1	?	?		Unknown
Mulfra Vean CH5 (fragment)	No data					
Mulfra Vean CH6 (fragment)	No data					
Nanjulian CH1	2	0	3	0		2030
Nanjulian CH2 (fragment)	No data					
Nanjulian CH3	1	1	2	0		1120
Nanjulian CH4	1	1	0	1		1101
Nanjulian CH5	1	1	0	1		1101
North Bosporthennis CH1	No data					

North Bosporthennis CH2	No data					
Porthmeor CH1	1	1	1	0	Yes	1101
Porthmeor CH2	1	1	1	2		1112
Porthmeor CH23 (fragment)	1	?	1	?		Unknown
Porthmeor CH4	?	1	1	?		Unknown
Porthmeor CH30727 (fragment)	1	1	?	?		Unknown
Treen CH1	1	1	2	1		1121
Treen CH2	2	1	1	2		2202
Treen CH3	1	1	0	2		1102
Treveal	No data					
Trevean CH1	1	1	0	1	possibly	1101
Trevean CH2	1	1	1	1	Plus attached roundhouse	1111
Trevean CH3	1	1	0	0	Plus attached roundhouse	1100
	Courtyard	Round room	Circular/oval room	Long room	Fogou	
Trewern	1	1	2	1		1121

Trink	No data				
Try	1	1	0	1	1101

Appendix 7

Assemblage details from the 45 non-courtyard house sites examined within this thesis were grouped and considered within an Access spreadsheet using the following categorisation:

Site Name		
Date		
Structure #		
Pottery quantity (sherds)		
Pottery	LBA	
	EIA	
	LIA	
	RC	
Context		
Spatial Patterning?		
Querns	Saddle	number of fragments
		fabric
		Context
		Condition
	Rotary	number of fragments
		Fabric
		Context
		Condition
Spindle Whorls	fabric	
	number of fragments	
	context	
Loom Weights	fabric	
	number of fragments	
	context	
Whetstones	fabric	
	number of fragments	
	Context	
Sling stones'	Fabric	
	number of fragments	
	Context	
Quartz	number of fragments	
	Context	
Beads	Fabric	
	number	
	Context	
Brooches	Material	
	date range	
	Context	

Bone	Animal	number of fragments
		Context
	Human	number of fragments
		Context
Coins	Number	
	Context	
Glass	number of fragments	
	Context	

Appendix 8

Situation of rooms in relation to the entranceway at courtyard house structures for which orientational details are documented.

Site/structure	Entrance orientation	Entrance is <i>directly</i> opposite....	To the right of the entrance....	To the left of the entrance....
Bosigran CH1	SE		Round room Circular/oval chamber	Long room
Bosigran CHEast	E	Circular/oval chamber		
Bosporthennis CH1	NE			Long room
Bosullov Trehyllys CH1	E	Round rooms		Long room Circular/oval chamber
Bosullov Trehyllys CH2	SE	Circular/oval Chamber	Round room Long room	Round room Long room Circular/oval chamber

Bosulow Trehyllys CH3	S	Round room		Circular/oval rooms
Bosulow Trehyllys CH4	S E	Round room Long room		
Botrea CH1	SW		Long room	Long room
Carn Euny CH1	SE N		Long room	Long room
Carn Euny CH2	E		Long room	Long room
Carnaquidden	SW			Long room Round room
Carne	S		Long room	Round room Circular/oval room
Chykembro	NE		Round room Long room	Circular/oval room
Chysauster CH1	NE	Round room		Long room
Chysauster CH3	N S		Long room Round room?	Long room Round room?
Chysauster CH6 (south)	E	Round room		
Chysauster CH6 (north)	E	Round room		Circular/oval chambers

Site/structure	Entrance orientation	Entrance is <i>directly</i> opposite....	To the right of the entrance....	To the left of the entrance....
Chysauster CH9	SE	Round room	Circular/oval room	Long room Circular/oval room
Croftoe CH1	SW		Round room	Long room
Croftoe CH2	N	Long room		Round room
Croftoe CH3	SW		Long room	Round room Long room
Goldherring CH1	E	Round room	Long room	Circular/oval room Long room
Nanjullian CH4	NE		Long room Round room	
Porthmeor CH1	SE		Long room Round room	
Porthmeor CH2	W	Round room	Circular/oval room Long room	Long room
Treen CH1	NW		Circular/oval room	Long room

Treen CH2	W		Round room Long room	Long room
Trevean CH1	NE		Round room	Long room
Trevean CH2	S	Long room	Circular/oval room?	Circular/oval room?
Trevean CH3	S			Round room
Trewern	SE		Long room	Round room Circular/oval rooms
Try	SW	Long room		

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