LANDSCAPE AND SOCIETY IN ORKNEY DURING THE FIRST MILLENNIUM BC

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ABSTRACT

This thesis explores the creation of embodied space and place in the landscapes of Orkney during the first millennium BC. This aims to address the persistent obsession with architectural evidence in Atlantic Scotland which has dominated research into the period, and has come at the expense of considerations of later prehistoric landscapes, particularly those of Orkney. Current approaches to the archaeology of past landscapes tend to be situated in one of two schools; one rooted in a ‘muddy boots’ approach to landscape archaeology which centres on the empirical collection and analysis of data; and a second more theoretically driven approach, which draws heavily on phenomenology to consider the ways in which people would have dwelt within past worlds. There has been little dialogue between practitioners of the respective approaches, and each camp has been heavily critiqued by scholars from the other. However there exists much shared ground between the two schools and it is proposed that within a theoretically driven research framework both quantitative and qualitative approaches to the landscape can be integrated more fully to illuminate the nature of the relationships between individuals and groups, and between people and the world during the later prehistoric period in Orkney and Atlantic Scotland. Such combination of techniques and approaches to the landscape also provides scope to consider the ways in which archaeologists collect, interpret and present data and study embodied archaeological landscapes.
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1 CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND TO THE RESEARCH

During the Iron Age substantial, stone-built roundhouses were almost certainly the dominant settlement form in Atlantic Scotland; in this respect long traditions of excavation have provided a wealth of evidence, but there is little understanding of other contemporary settlement, field systems or burials (Hingley 1992, 12). Elsewhere in the region, landscape scale research has explored the physical, social and chronological changes within the landscape (e.g. Armit 1992; 1994; Branigan & Foster 2000; Parker Pearson 2012a). This research whilst valuable has in general been from the point of view of the relationships between conventionally defined settlement forms (Harding & Armit 1990, 76) and thus ultimately perpetuates site specific approaches that fail to fully engage with the landscape as an active entity in its own right. As a result I would argue that the ways in which people during the later prehistoric period would have organised, manipulated, understood and been affected by the environments and spaces in which they dwelt has been neglected as an area of research. The persistent obsession with structural evidence at the expense of the wider landscape has been recognised, as has the need to move beyond site dominated approaches (Barrett 1981; Haselgrove et al. 2001; Ballin Smith & Banks 2002; ScARF. 2012k; 2012l).

In contrast to the extensive and often well preserved archaeological landscapes of much of the Atlantic Scotland region, the traditional perception has been that the richness of Orkney’s archaeological resource lies in single sites which sit in modern agricultural landscapes (Lamb & Turner 1991, 167). Superficially such a view appears to be particularly true of the Iron Age in Orkney, with the brochs which apparently characterise and represent the main type of settlement evidence for the period, visible in the landscape either as extremely large mounds (Figure 1.1) or as substantial settlements in which clusters of outbuildings are wrapped around
the base of a towering roundhouse. A number of less sizable roundhouses have been excavated, as have several souterrains; however this evidence is physically less visible within the landscape, a position that is echoed in the comparative weight which it is given in archaeological literature and summaries of the later prehistory of the islands. It is also true to say that records of extensive areas of landscape in which later prehistoric field boundaries and other agricultural features can be identified are sparse within the archipelago – undoubtedly a product of the many generations of cultivation undertaken in the lower, more fertile areas which have over the last few decades become increasingly mechanised and intensive. More recent forays into uncultivated and upland areas (e.g. Hunter & Dockrill 1982; Hunter 1991; Sharman & Robertson 2007), however, have begun to suggest that where agricultural practices have been less damaging there is the potential for survival of such features, and the increasingly frequent application of geophysical survey within the islands over the last two decades (Dockrill & Gater 1992; Gater et al. 2006; Card et al. 2007; ScARF. 2012k) has also illustrated the possibilities of earlier landscape features still being identifiable.

There is then the potential for the preservation and recognition of later prehistoric landscape features within at least some of the landscapes of present day Orkney. However this only moves half a step beyond the preoccupation with brochs and roundhouses that has characterised research into the later prehistory of Atlantic Scotland. There remains a danger that any new landscape features recorded as the result of walkover or geophysical survey might still be seen as cultural components inserted into an inert natural backdrop, rather than as elements of a dynamic and meaningfully constituted landscape. Despite being well-developed in relation to other parts of the British Isles and with respect to other periods of research, notably the Neolithic, post-processual approaches to the archaeology of landscapes, have generally not been widely applied to the later prehistoric landscapes of Atlantic Scotland and in particular to Orkney. The relatively rich datasets and established regional framework of
Orkney provides a good context for the application and evaluation of different theoretical approaches (Haselgrove et al. 2001, 24-25). There is then much scope for, and value to, the consideration of the importance of the human experience and perspective, and to apply these approaches to the landscapes of Orkney. Concepts of space and place, as a context for dwelling, are central to the recognition and interpretation of inhabited and embodied landscapes, and as such the identification and characterisation of spaces and places through the application of a phenomenological perspective is central to this research.

Figure 1.1 The problem and perception of the later prehistoric landscape of Orkney. North Howe broch, Rousay surrounded by extensive modern cultivation (Aerial photograph from Orkney SMR, Image A41847 © D.W. Harding 1983)
Chapter One: Introduction

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1.2 RESEARCH AIMS AND OBJECTIVES

Two threads are identifiable running through this research. Firstly the research aims to investigate the embodied later prehistoric landscapes of Orkney as a means of considering the nature of the changing relationships between people and the world in which they dwelt during this period. The second aim is to explore and apply a suite of traditional and experiential landscape archaeology methodologies with a view to blending both quantitative and
qualitative approaches and datasets in the study of the later prehistoric landscapes of Atlantic Scotland.

The comparative wealth of excavated evidence both from antiquarian and modern investigations provides a good basis for research, but the lack of consideration of embodied later prehistoric landscapes necessitates the collection of a significant body of data with which to balance and reconsider interpretations in which the landscape has been considered primarily in economic terms or as a passive backdrop to activity. As such a heavily field-based approach is necessary in which additional quantitative and qualitative landscape survey is undertaken in order to provide a better understanding of both the physical features and experiential character of the landscape. Given the intensive nature of such fieldwork and the inherent constraints of time and resources of a PhD, a case-study approach is adopted. With the above aims and themes in mind three key objectives are identified for the overall research project:

a) Compile an exhaustive body of survey data relating to the prehistoric landscapes of two case-study areas within the Orcadian archipelago. This will form an important body of empirical data covering both agricultural landscapes and under-studied upland areas of Orkney.

b) Undertake an exploration of the embodied experience of these same case-study landscapes.

c) Integrate and discuss these quantitative and qualitative datasets through the utilization of concepts of space and place to consider the ways in which people during the later prehistoric period structured and understood the worlds in which they dwelt.

The nature of this research is such that it is not possible to produce an exhaustive account of the later prehistoric landscapes of Orkney, both in terms of the areas covered and the
inherently subjective character of much of the data. As such this research represents an archaeology of the Orcadian landscape during the first millennium BC, rather than a definitive account, recognizing that other interpretations are possible and indeed welcomed in an effort to stimulate healthy archaeological debate that extends beyond the refinement of architectural typologies.

1.2.1 STRUCTURE OF THE THESIS

The thesis is divided into three main parts. Section one, comprising Chapter 2 and 3 provides a theoretical and empirical review of the background to the research. It presents a discussion of the history of research into the first millennium BC in Atlantic Scotland, and in doing so highlights some of the biases and weaknesses in the ways in which the landscapes of Orkney, and indeed the rest of the region, have been considered during the later prehistoric period. Chapter 3 goes on to consider the theoretical and methodological ways in which archaeologists can explore the landscape. Concepts of landscape, place and space, and particularly the importance of embodied and experiential landscapes are considered as are a range of methodological approaches. The chapter concludes by reflecting upon the ways in which the apparently distinct and mutually exclusive datasets that result from such qualitative and quantitative approaches to the landscape can be integrated, interpreted and represented.

The second section, comprising Chapters 4 – 7 represents the core of the research project. The case study areas in which fieldwork was undertaken are described, both in terms of their geographical and archaeological nature and extents, and also the history of research which has previously been conducted. Building on the theoretical and methodological discussions in the preceding chapter the methodology employed in the current research is outlined, and it is this methodology that provides the structure for the rest of the section. As such the detailed and extensive walkover survey is presented in Chapter 5 and considers the ways in which prehistoric monuments may have related to their landscapes, whilst Chapter 6 comprises the
results of more detailed mapping to consider some of the ways in which later prehistoric peoples may have created different types of spaces. Chapter 7 balances these comparatively objective datasets with a detailed consideration of the experience and character of the different landscapes that have already been introduced. Recognising the potential for such detailed case-studies to be non-representative of wider trends in dwelling during the first millennium BC, the third section, Chapters 8 and 9, draws together and summarises the themes and conclusions that have been drawn from the different approaches to the landscape that have been employed within this research, and discusses them in the broader context of later prehistory in Orkney, Atlantic Scotland and indeed further afield. In Chapter 10 I will conclude by reflecting on the two threads that run through the thesis, considering the value of a combination of quantitative and qualitative approaches to the landscapes of Atlantic Scotland during the first millennium BC, and engaging with wider debates about the ways in which archaeological interpretation, and in particular human-scale landscapes, are presented and communicated.

1.3 A NOTE ON TERMINOLOGY

Although this thesis sets out to address the obsession with settlement architecture, it is of course necessary to discuss a number of the sites and also the spaces and places which they form. The history and complexity of the architectural typologies which have been developed with regard to the settlement record of the Iron Age of Atlantic Scotland will be discussed in more detail in Chapter 2, and although the use of classifications is unavoidable in the consideration of archaeological material, the application of such typologies has been central to the abstraction of Iron Age settlements from their wider context (Baines 1999, 27-28).

This is not to belittle the considerable variation in the scale and architectural complexity of these buildings which is undoubtedly present, but in utilising terms such as broch or
roundhouse I am not favouring a specific classificatory system, nor am I concerned with defining exactly when a roundhouse stops being simply complex and becomes a broch. Rather I am recognising that although they all retain the fundamental spatial form of being circular common throughout the British Iron Age, the ways in which spaces were created, utilised and experienced is likely to have differed between buildings of different scales. Therefore a simple tripartite schema – broch, roundhouse, hut circle – reflecting different degrees of architectural complexity is employed in the majority of the thesis, the exception of course being in the extended discussion of typologies in Chapter 2. It should also be noted that where the recorded name of a site, for example the Broch of Gurness, is used this will be capitalised to differentiate it from the broad typological category which will be written in lower case.
2 CHAPTER TWO: THE FIRST MILLENNIUM BC IN ATLANTIC SCOTLAND

It is not the intention of this chapter to provide an exhaustive summary of the first millennium BC in Atlantic Scotland. Rather, in recognition of the nature of scholarly research which builds on the work of those who have come before us, this chapter will explore the history of research and the manner in which present interpretations of the later prehistoric in Atlantic Scotland have developed. A critical assessment of this material will provide the background for the fieldwork and the detailed case-studies which form the core of the thesis and will be presented in later chapters. An initial and general summary of the background to the study of the British and Scottish Iron Age provides a broad context for this research, but of central importance are two themes, domestic architecture and the later prehistoric landscape, which will be discussed and critiqued in more detail. The distinction made below between sections 2.2 and 2.3 reflect what I would argue is a very real divide in the study of the Iron Age in Atlantic Scotland. Such a divide can undoubtedly be traced back to the scientific rationalization of nature that is a legacy of the Enlightenment origins of much scholarly activity. Thus whilst we must be cautious of the uncritical application of such divides to past societies, it is important to trace the origins of these research themes in order to judge their applicability to modern interpretations.

2.1 APPROACHES TO LATER PREHISTORY IN SCOTLAND

The prevalent intellectual framework which dominated archaeological research in the 19th and early 20th centuries resulted in the general view that all innovations and cultural developments had to flow northwards, brought by invasion or immigration, initially from the continent into southern Britain and eventually on into Scotland (Hingley 1992, 10). The Three-Age system and European La Téne and Hallstat typologies provided an initial model, focused upon artefact
assemblages, with which to understand the later prehistoric material being discovered in Britain, and these tied to the supposed waves of immigration, provided the basis of the classificatory ‘ABC’ framework for the British Iron Age developed by Christopher Hawkes in the early 1930s (Cunliffe 2010, 3-20; ScARF. 2012a). In a Scottish context, perhaps the most notable and influential adoption of these diffusionist ideas were those by Euan MacKie (1965a; 1969) in which broch architecture, although considered a local development, was attributed to refugees from the Belgic invasions of south-eastern England during the first century BC. These models of social change hinge on two inter-related concepts; firstly that cultures are inherently conservative and major changes in material culture were only brought about by outside forces and secondly that material culture is a direct index of social, political and/or ethnic groupings. Invasionism held sway in interpretations of prehistoric change until Clarke’s comprehensive critique of the theory (Clarke 1966), and the processual theoretical movement saw a growing rejection of such a monocausal explanation of change, instead considering the role of environmental and economic factors. It was not, however until post-processual and interpretative approaches began to be adopted, albeit somewhat slowly in the study of the Iron Age (Baines 1999, 25), that the underlying nature and complexity of the relationship between human social practices and their material residues began to be explored.

In contrast to earlier studies in which a single, coherent British Iron Age, with a distinct set of common features, was identified, a strong concept of regionality has developed and lies at the heart of many discussion of the British Iron Age (Haselgrove et al. 2001, 22-23). In many of these models, groupings of material culture have been seen as evidence of distinct regional culture groups; the most famous being Cunliffe’s distribution of material culture which presents a view of the British Isles during the Iron Age as one of regional variation with which some the tribal groupings recorded in classical literature could be identified (Cunliffe 2010). The criteria used to define these regional groupings, and indeed where the edges of these regions were, provided a
source of much debate and empirical critique, however more problematically the culture-history approaches which underpinned these abstracted archaeological cultures have obscured a much more messy reality in which Iron Age people did not live in ‘cultures’ but acted culturally (Giles 2008, 336).

In a Scottish Iron Age context, Piggott (1966; see also Rivet 1962, fig 1; ScARF. 2012e) identified four provinces – Atlantic, North-East, Solway-Clyde and Tyne-Forth (see Figure 2.1). The Solway – Clyde Province is generally considered to be rather under-represented in the archaeological literature and it has been suggested that the area has been largely ignored in favour of other areas of the country (Banks 2002), although there has been some investigation of a number of crannogs, duns, hillforts and other enclosed sites. In contrast the Tyne-Forth region has a wealth of archaeological remains, and recent work, much of it commercially driven, for example the development of the A1 in East Lothian (Lelong & MacGregor 2008), as well as a strong focus on aerial photography by the RCAHMS (Cowley & Gilmour 2005). The region is characterized by elaborate, often multivallate, hillforts and enclosures, such as Traprain Law and Broxmouth. The unilinear model, known as the Hownam sequence, which proposed a sequence of settlement forms through time from unenclosed settlement through univallate and multivallate forts and finally back to unenclosed settlement, has been undermined by recent excavations and improved chronological frameworks (Armit & Ralston 2003, 176; ScARF. 2012o). There is clearly greater local and chronological variation, but there is still much evidence to support a gradual trend towards acts of enclosure through the first millennium BC – a phenomenon shared with much of temperate Europe during this period (Wells 2007, 390). The North-East region stretches from the Firth of Forth up to the Moray Firth, and particularly to the south shares many similarities with sites in the Tyne-Forth region. There appears to be far less emphasis upon acts of enclosure, with only a few hillforts, and the bulk of settlements are open clusters of roundhouses. Areas within the region such as Angus illustrate the diversity of the archaeological record, with plentiful
evidence of a variety of timber built roundhouses, stone-walled ‘hut-circles’ and a handful of massive stone-walled roundhouses commonly referred to as the ‘southern brochs’ (Dunwell & Ralston 2008, 92-106). The Atlantic region is most notable for the dry stone roundhouse architecture and as a result of the embarrassment of riches research in Atlantic Scotland has dominated the study of the Iron Age of Scotland (Hingley 1992, 12; Armit & Ralston 2003, 170) which will be discussed in more detail below.

Figure 2.1 – Examples of the regional division of Scotland. Left: Piggott’s scheme together with the principal distributions of regionally distinctive settlement (Armit & Ralston 2003, Fig. 10.1) Right: Harding’s regional definition of Northern Britain (Harding 2006, Fig. 3).

Whilst, these divisions have been modified and elaborated upon, for example Dennis Harding’s (2006, 6) efforts to differentiate Northern Britain as something more than a euphemism for Scotland, the underlying regionality continues to be recognized. In essence the same underlying
theoretical principles can be seen in the identification of a shared Atlantic culture, in which regional variations in dry stone building techniques and traditions are viewed partially as a result of indigenous influences and partly through the existence of wider Atlantic contacts (Henderson 2000; 2007). Models such as Henderson’s are problematic due to their reliance on the shared architectural traits of the monumental stone architecture (see detailed discussion below). It has also been argued that the lack of attention to material culture, which because of the ‘limited evidence for the movement of objects or raw materials, and locally different material assemblages provides some very different ideas’ (Sharples 2010a), also undermines ideas of shared Pan-Atlantic cultural groupings. Also of concern is the effect that models of regionality have upon the ways in which identity is conceived. Implicit in social geographies of bounded territories is the idea that cultural identity is something passively inherited and therefore only modifiable through outside influence – in opposition to this cultural historical approach, a more theoretically aware relational model of identity stresses that identity is not something that one ‘is’ or ‘has’ but rather something that one ‘does’ (Giles 2007c, 105). Regional division is arguably necessary for convenience, presentation, discussion of the material and particular focused approaches (Armit & Ralston 2003, 170) and it will rightly continue to form an important area of research within which greater consideration needs to be given to the problems of more nuanced intra-regional variation and identity.

The chronology of the Bronze Age draws primarily upon pottery and metalwork (Coles 1960; ScARF. 2012b); in contrast, the chronology of Iron Age Atlantic Scotland is inextricably linked to the architectural typologies developed during the 19th and 20th centuries (ScARF. 2012m). These typologies will be discussed in more detail below. However alongside the regional and spatial contexts we must consider the broader chronological span, in order to highlight the differences within the British Isles. In the Scottish Iron Age this is particularly significant because the role of the Romans was considerably less than the south of Britain. Such variation in chronologies is often
problematic, for example Cunliffe’s *Iron Age Communities in Britain* (2010) ends in AD43 and serves to highlight the Wessex-centric nature of his models. In Scotland the incursions of the Roman army had a minimal impact on much of the country and as such are insufficient reason for suspending study after the first century AD (Haselgrove *et al.* 2001, 3). Thus the ‘long Iron Age’ runs from the beginnings of the use of iron through until the arrival of the Norse towards the end of the first millennium AD. Two models of the long Iron Age are generally utilized, although within these the exact dates remain open to variation depending on the region and the emphasis that individual scholars have placed upon certain strands of evidence. A bipartite model is put forward by Harding (Harding 2004, 3-4) who favours a simple division between ‘Earlier’ and ‘Later’ with the change-over occurring around the time of the decline of monumentality in Atlantic Scotland, and the Roman withdrawal in the south. More traditionally, a tripartite system – Early, Middle, Late – has been employed (e.g. Barrett & Foster 1991). This system is particularly pertinent to Atlantic Scotland and will therefore be employed in the current research.

A date of c. 800 BC is generally accepted as the beginning of the Iron Age, a date dependent upon the appearance of iron artefacts and smithing and smelting practices (Armit & Ralston 2003; Ralston & Ashmore 2007) highlighting the continuation of the technological focus of the Three-Age system. However there is increasing acceptance that the Later Bronze Age must be considered in order to better contextualize the developments of the Earlier Iron Age. Although there is clear continuity in some aspects of the material culture, for example roundhouse construction (ScARF. 2012h), there is a danger in the wholesale acceptance of this view, as demonstrated by the metalwork evidence (Needham 2007, 39). The beginning of the Middle Iron Age is generally more contentious, relying heavily upon the architectural sequence which will be discussed in more detail below, but falls somewhere between 400 – 200 BC. Another strand of evidence in establishing this break is the transition from saddle to rotary querns. The central hypothesis originally put forward by Caulfield (1977) is that the superiority of the rotary quern
would ensure a rapid adoption of the new technology, thus a ‘quern replacement horizon’ lasting an unknown, but very short, period in which both types of quern were contemporary, is suggested (Armit 1991, 190-195). Whilst such a division is perhaps somewhat simplistic, and a transition is unlikely to have taken place as an act of cultural uniformity across the whole of the British Isles (ibid.) the absence or presence of rotary querns provides a useful short-hand with which to ascribe sites to an earlier or later period. Harding (2006, 73-74) suggests, on the basis of the dating of rotary querns from Danebury, that this technological innovation would have appeared in Atlantic Scotland around the fifth or fourth century BC, at the same time as the development of monumental architecture. A more cautious estimate of c. 200 BC was put forward for the quern transition by Armit (1991) in his important paper on the chronology of the Atlantic Scottish Iron Age, which stressed the importance of drawing together a range of evidence in order to clarify the chronological basis of studies whilst also undermining unilinear models for the whole of the region. A date of c. AD 200 is generally accepted as the terminal date for the Middle Iron Age, with Hingley (1992, 7) choosing the date in order to avoid discussion of the Picts. Like many elements of the ‘long’ Iron Age this date for the beginning of the Later Iron Age draws heavily on evidence from the Atlantic region, in this case representing a phase when new structural elements appear and brochs were no longer utilised in their original form (Barrett & Foster 1991), although Armit (1991, 184) suggests that this date does not correspond to an actual break in the archaeological sequence.

Ultimately the definition of horizons between archaeological periods is always problematic, and more reflective of modern archaeological practice than any conceptualizations of time in the past. There is no universally accepted chronological scheme for the Scottish Iron Age (Harding 2004, 4) and the date ranges offered by different scholars can differ significantly (see for example Armit 1991; Hingley 1992; Parker Pearson et al. 1996). A shift away from the complex classifications and typological sequences that formed a fundamental part of cultural-historical approaches reduces
the priority for these chronologies (Harding 2004, 4). Instead of being used only to describe a formal sequence of social organization, time can be appreciated in the rhythms and routines of lived social life, as the temporal context of social reproduction (Barrett & Foster 1991, 45) which is equally as important as the spatial and will be discussed in more detail in the next chapter.

2.2 BROCH-OLOGY

The rich settlement record of Atlantic Scotland has been the basis of interpretations of the Iron Age in the region. This has promoted considerable debate that has focused on three interlinking themes: the development of complex typologies based upon architectural complexity, the chronology of the development of these monumental structures, and their function and origins. These debates can trace their origin to the work of 19th century archaeologist Joseph Anderson, who identified the series of architectural features, hollow walls, scarcement ledges, guard cells etc. that remain the cornerstone for almost every academic discourse on the subject (Baines 2003). Two of the leading contributors to the debate, Ian Armit (1990; 2005a) and Euan MacKie (1965b; 2002), have both put forward typological sequences of the evolutionary development of brochs and associated circular (and sub-circular) dry stone structures, which are based on these architectural elements. Since the 1980s there have been increasing efforts made to reject traditional classificatory approaches to brochs (e.g. Macinnes 1984; Reid 1989) however in the main the individual monument types have been seen to present a guiding framework for analysis, which can be made clearer by further refinement and precision of each type (Barrett 1981, 207).

A date of c. 800-700 BC is generally identified with the appearance of simple thick walled roundhouses such as Bu (Armit 1991, 186-189; Parker Pearson & Sharples 1999, 359). However the excavation of roundhouses, such as structure four at Tofts Ness, Sanday, with a date, albeit problematic, of c. 1000 BC (Dockrill 2007, 73 & 382) has the potential to push the development of substantial roundhouses back into the Late Bronze Age. Such data further supports the assertion
that any discussion of Iron Age settlement and society should start in the Late Bronze Age which saw a state of social, economic and technological flux across much of Atlantic Europe (Harding 2006, 79). The appearance of broch towers is far less clearly defined, a situation which is closely related to the problems of defining brochs themselves. Armit (1991) suggests that such monumental structures may have appeared some time between 400 – 200 BC, but others have argued that the importance of dates from sites such as Howe and Dun Bharabhat which do not satisfy their definition of broch towers has been exaggerated and instead put forward a date in the first century BC (Parker Pearson et al. 1996, 59; MacKie 2010). The scientific dating of the construction of Old Scatness to 390-200 cal BC (Dockrill et al. 2006), would appear to add considerable weight to Armit’s view, although MacKie (2008, 273-274) continues to reject the idea of a wholesale adoption of broch architecture across Atlantic Scotland during the third or fourth centuries BC. The demise of such monumental structures generally seems to occur around the second to third centuries AD (Armit 1991, 201-202; Harding 2006, 74), and it is from this point up until c. AD 900 that rectangular, cellular and figure-of-eight houses becoming increasingly prevalent (Parker Pearson & Sharples 1999, 359).

MacKie’s apparent obsession with quantifying these architectural variations, has led him to develop numerous sub-categories. Classification of broch-like roundhouses, Hebridean semi-brochs etc. provide a rigid typological sequence, with an evolutionary progression towards a narrow and homogenous class of true broch towers. The essence of MacKie’s (2008; 2010) hypothesis is that the brochs are a small group of elaborate monuments who have their origin in structures that he identifies as semi-brochs, such as Dun Baravat, Lewis. These are a small group of non-circular, but hollow-walled architectural features, normally built in naturally defensive positions such as promontories and cliff edges (MacKie 2008, 267). Therefore according to MacKie’s scheme, true broch towers, in their full architectural glory, developed from this small class of semi-brochs, whilst the multitude of hut-circles found across Scotland, and the various
substantial dry stone roundhouses, such as Bu in Orkney, represent a separate evolutionary thread. Such a rigid typological sequence is problematic when the variable level of preservation of these structures is considered. Examples of intentional demolition during the lifespan of some brochs, for example The Cairns, Orkney (M. Carruthers, *pers comm.*), as well as two millennia of natural erosion and stone-robbing, suggest that we should exercise caution in the uncritical acceptance of the present day structures as representative of the forms of the Iron Age. Perhaps more significantly MacKie does not address the question of why the fundamentally different D- and C- shapes of dwelling space in the semi-brochs sprang briefly into existence (MacKie 2008, 272), before being replaced by a return to the circular dwelling spaces that had already been common across the British Isles for several hundred years.

![Diagram](image)

**Figure 2.2 – Armit’s nested model (after Armit 2003, 17)**

An alternative, the Atlantic Roundhouse terminology, was developed to accommodate traditional views (Armit 2005a, 5) whilst also recognising the wealth of subconscious prejudices and the overriding concern with the detail of architectural typology (Armit 1991, 182). Armit’s system (see Figure 2.2) identifies a limited category of broch towers in a similar manner to Mackie; these sit
within a larger grouping of complex Atlantic Roundhouses, which share much of the architectural elaboration without being multi-storey structures. These in turn are nested within an all-encompassing category of Atlantic Roundhouses, of substantial dry stone built roundhouses.

Whilst Armit’s system provides greater flexibility and accepts that buildings cannot be defined with absolute precision, the different nested sub-categories are still defined by architectural traits and the model retains an implicitly evolutionary development. Baines’ (2003) rigorous critique traces the reliance upon architectural traits back to the late-19th century origins of broch studies, arguing that in seeking to impose order on a haphazard collection of empirical data Anderson emphasised similarity at the expense of difference and explicitly reduced the significance of variation within the broch type (Ibid. 3-6). This reduction of variety can be seen in many of the publications throughout the twentieth century which attempted to refine broch typologies, in connection to establishing both a ‘normal’ broch plan as well as the geographical origins of the building (e.g. Graham 1947; Young 1962; Martlew 1982). MacKie in particular appears driven by a desire to identify and categorise a distinct broch tower ideal; a quest rather undermined by his hypothetical standard broch being based upon a composite of three brochs (MacKie 2002, 4).

Another potential broch paradigm is Mousa in Shetland, which is often highlighted as the best preserved broch in Scotland. However statistical analysis has suggested that whilst it is an exceptional monument, it is quite atypical both in comparison to other Shetland brochs, as well as the wider Atlantic Roundhouse traditions (Fojut 1981). That even some of the best-preserved and most fully excavated brochs in Scotland cannot provide evidence of the full suite of broch architectural elements, must surely suggest that rather than a checklist with which to assess the degree of ‘broch-ness’, these architectural features represent the ways in which physical and social spaces were created and reworked. Thus architectural variability may not directly represent social position, but rather the more subtle modifications and appropriations of cultural trends by individual households. This obscuring of variation, as well the focus upon architectural features
over the social practices which produced them, has clearly held back Iron Age studies, as Barrett (1981, 208) asks ‘somewhere in Scotland, according to our definitions, is the earliest broch, but if we ever find it, will we really be closer to understanding these monuments?’

One of the most recent contributions to the broch debate has put forward a bipartite system, drawing on Armit’s Atlantic Roundhouse terminology and based on the distinction between composite walls (a mixed core of rubble, soil etc. faced on the interior and exterior with coursed masonry) and solid walls (entirely composed of coursed masonry across the width of the wall) (Romankiewicz 2009). Unlike Armit and Mackie’s models such a terminology enables hut circles to be more closely related to Atlantic Roundhouses as they share the same composite wall structure; solid wall construction is seen as a result of experience and experimentation in an effort to develop structurally stronger buildings more able to support greater heights. Romankiewicz’s system is alluringly simple, and undermines the evolutionary schemes favoured by previous authors by demonstrating that significant changes in construction methods once considered indicative of chronological sequence are most likely contemporary regional variations (Ibid. 391).

But it is still based on architectural traits that are only discernible in the handful of examples which have been excavated and recorded in detail. The vast majority of Iron Age dry stone roundhouses remain visible solely as large grass covered mounds – impossible to accurately date or to fit into even the most simple of typological sequences (Baines 2003).

As with the typologies of brochs, interpretations of their function have also been based upon a considerable accumulation of scholarly debate (see ScARF. 2012i), which has proved surprisingly resistant and has focused on two key themes; status and defence, both of which can be seen to have their origins in the diffusionist paradigms of the first half of the twentieth century.
Chapter Two: The First Millennium BC in Atlantic Scotland

The idea of brochs representing the impregnable strongholds of an invading elite, situated to dominate a subject population, was put forward by Childe in *The Prehistory of Scotland* (1935). Even during the first half of the twentieth century when archaeology was underpinned by diffusionism and invasionist theories, problems were being recognised with some of these ideas, with Sir Lindsay Scott suggesting that “brochs were neither towers of refuge, nor baron’s castles, but farmhouses...situated to command an area of farmland” (1947, 33). Research has subsequently demonstrated a clear link between broch structures and agricultural land (Fojut 1982) and it has also been suggested that over much of the region, broch sites are too numerous and closely spaced to represent the homes of a minority ruling class whilst evidence for the homes of the less powerful is lacking (Hingley 1992, 25; Baines 1999, 20). Despite these observations, the role of brochs as defensive structures has persisted in the interpretation of some sites, such as Howe, Orkney (Shepherd 1994, 284-287), although a strong body of literature critiquing the practibility of brochs as purely defensive structures has now developed (e.g. Sharples 1998, 206-207; Blythe 2005). Almost certainly the rejection of brochs as defensive structures can also be connected to a trend amongst many archaeologists during the later twentieth century, towards a pacification of the Iron Age, resulting from both processual and post-processual approaches, as well as the wider cultural context of the twentieth century, which have viewed violence as a last resort when society stops working properly (James 2007). Whilst purely defensive interpretations have rightly been dismissed the architectural evidence does imply that in many regions of Britain, including Atlantic Scotland, farmsteads that were strongly defended (or at least gave the appearance of being so) were an integral part of society. James (*Ibid.*) has suggested that rather than a simplistic opposition between war and peace, Iron Age societies may have existed primarily in a state of ‘endemic insecurity’ within which conflict and violence was a powerful social force, taking the form of raiding and small-scale, more-or-less ritualised, group combat, representing an important means of negotiating relationships and identity. Such forms of warfare and social structuring are attested to in classical sources (Cunliffe
2010, 541-542) and similar conclusions have also been drawn specifically with regard to brochs through comparison with similar architectural traditions of tower building() drawn from ethnographic and historical sources (Parker Pearson & Sharples 1999, 360-362).

Whilst interpretations of brochs as castles have fallen from favour, the role of these sites as elite residences has remained a key question. In the earlier Iron Age in Scotland most recent interpretations propose a model of generally small-scale, decentralised societies with a relative lack of social or political hierarchy (Ralston & Ashmore 2007, 230). However during the later half of the first millennium BC general trends of elaboration of structures, and the increasing size and enclosure of settlements, are seen as evidence for increasing centralization and the emergence of an elite which demonstrated its dominance and legitimacy through the imposing characteristics of their dwellings (Armit & Ralston 2003).

In an Atlantic context this elaboration is particularly evident. Three themes have been considered through the creation of this architectural monumentality: status, communal identity and the culture-nature divide (Hingley 1995). Such monumentality might have acted as a powerful symbol of legitimacy and control (Armit 1997), or as attempts to embody an eternal and imperishable social order (Parker Pearson & Richards 1994), situated both conceptually and physically at the edges of the human world on the margins of uncontrollable nature (Baines 2005, 184). In rather more functionalist terms the broch has been interpreted as a multi-functional defended homestead that acted as an administrative and symbolic centre for the socio-economic control of people and territory (Dockrill et al. 2006, 108). Substantial roundhouses such as Bu are contrasted with the contemporary, but much smaller roundhouses such as Tofts Ness (Dockrill 2002, 159). In this model monumental and architecturally complex brochs formed the focus of power for a social structure based on a hierarchical client/patron relationship facilitated through central storage and redistribution of economic surpluses as well as control and exchange of resources
such as breeding stock and specialist materials and skills, particularly metalworking in return for labour, services and contributions of economic resources (Dockrill 2002, 159). Similar models have been put forward in the Western Isles with brochs positioned at the peak of a hierarchical system with the inhabitants of wheelhouses as clients (Parker Pearson et al. 1996; 1999); although the evidence for this model of social structure has been criticised as somewhat simplistic in not embracing greater social, regional and local variability (Gilmour & Cook 1998). In these models of social hierarchy the typological characterisation of an elite broch together with less architecturally complex structures representing the lower tiers of society is necessary, and the problems of such an identification even amongst the excavated examples has already been discussed above. An analysis of the group of brochs at Keiss, Caithness, produced little evidence for subservient households in the landscape, leading the authors to reiterate the point that status needs to be interpreted based on more than geographical patterning and architectural nuances (Heald & Jackson 2001, 138). Such a view is also held by MacKie (2008; 2010) who draws together architectural evidence, pottery and metalwork to argue for brochs as the dwellings of local chiefs, although the argument is weakened by the problems with the typologies discussed above. Despite these various interpretations of function a simple, yet insightful observation made more than twenty years ago, that ‘very little has been said about the activities that took place in the buildings and how the spatial arrangement of such structures might help to understand changes in social organisation’ (Reid 1989, 5-6) remains true. A notable exception to this has been the access analysis of the broch villages at Gurness and Midhowe, based on the premise that there is a clear relationship between the complexity of architectural space and social structure, which has suggested that the considerable spatial depth is representative of a social elite in the interior of the broch, who are separated from the subservient population who dwelt in the surrounding village (Foster 1989). Whilst such an approach can only be applied to excavated settlements, and can be critiqued on the basis of the problematic identification of contemporary spaces and their
function, it is surprising that such approaches have not been refined and applied to other better understood sites.

Brochs were not simply status symbols which sprang fully formed into existence. By viewing them within a wider evolving tradition of house building that can be traced back to the late Bronze Age then the increasing elaboration and monumentalisation can be seen in terms of a competitive social system in which certain households achieved a pre-eminence, with the very acts of construction recognizing an authority continually seeking to reassert its own validity (Barrett 1981, 215). Whilst these interpretations of hierarchical social models are closely tied to the often problematic categorization of architectural complexity and monumentality, the evidence does appear to be indicative of the emergence of a social elite during the mid-first millennium BC in Atlantic Scotland. A similar trend has been recognized throughout the British Isles and north-western Europe from c. 400 BC. Changes in the use of settlement space and increasing displays of wealth through personal adornment, feasting, the use of horses and increasing monumentalisation of structures seem to point to new forms of social interaction and an increasing emphasis on the individual (Bradley 2007, 270-271; Haselgrove & Moore 2007, 7).

Another area in which interpretations have moved beyond discussion of social structures, has been through their analysis as cosmological referents, a theme that was particularly popular within Iron Age studies during the 1990s. The well-preserved architectural remains of Atlantic Scotland provided excellent examples from which a model, based upon the orientation of entrances and the distribution of activities within the house, was put forward that suggested the movement of the sun was of central importance to an understanding of the Iron Age world (Parker Pearson 1999; ScARF. 2012i). More recent critiques have clearly highlighted the potential problems of structuralist principles and an over-reliance upon cross-cultural analysis (Pope 2007) but have ultimately returned to simplistic functionalist interpretations which were originally
critiqued. Recent research covering north and central Britain (Pope 2003), Wales (Ghey et al. 2007) and Atlantic Scotland (Crowther 2011) has however re-stimulated engagement with such interpretations and is illustrating greater nuance to the original observations made by Oswald (1997) and Parker Pearson (1996; 1999). Such observations are providing greater opportunities to consider the house during later prehistory in both practical and symbolic terms.

2.3 LATER PREHISTORIC LANDSCAPES

Traditionally models of prehistory have identified a perceived shift from the sacred, ritual landscapes of the Neolithic and Early Bronze Age, to the domestic, agricultural landscapes of the later Bronze Age and Iron Age (Parker Pearson 1993, 125-134; Barrett 1999). This emphasis can be clearly seen when considering the ceremonial Neolithic landscapes around Brodgar in Orkney and Callanish, in Lewis. In contrast, the consideration of the Iron Age beyond those substantial circular walls has been comparatively limited in Atlantic Scotland. The bulk of the research that has been conducted can be categorised in one of two ways: the consideration of settlement distribution, and environmental research. Models of patterns of settlement, primarily focused upon broch distribution have been proposed for Orkney (Rahn 2007), Shetland (Fojut 1980; 1982; Lamb 2010) and the Western Isles (Parker Pearson et al. 2004; Parker Pearson 2012a). Although employing varied methodologies, all ultimately aim to address questions of socio-economic territories and communication, and to varying degrees have taken fairly functionalist approaches to the landscape, with Fojut (1980; 1982) in particular utilising an explicitly processual methodology. These models have tended to focus on the size rather than character of the landscape, with distances travelled and cultivable areas being of central concern, and as such problematically, and often implicitly, view the landscape as a static entity that directs human activities. Whilst still having value in stimulating discussion of the relationships between sites the increasing critique of settlement hierarchies based solely upon architectural typologies also raises concerns with aspects of such models of broch settlement patterns. Environmental research has tended to draw
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primarily upon the evidence from excavations, and as such there is an inevitable site-based focus. Some of this evidence has been applied to broader modelling of the environment (ScARF. 2012d), but the majority of this research has been focused upon the economic use and exploitation of the landscape by individual sites (e.g. Ceron-Carrasco et al. 2005; Guttmann et al. 2006). The economy of these agricultural landscapes is then central to our current understanding of the Iron Age. The recent recognition, and excavation, of an increasing number of non-domestic sites such as High Pasture Cave, Skye (Birch 2008), Knowe of Skea, Westray (Moore & Wilson 2007), and the promontory at Gob Eirer, Lewis (Nesbitt et al. 2011), has further highlighted problems with considering Iron Age landscapes as purely practical, economic and domestic.

Throughout northwestern Europe questions of changing settlement patterning have been at the centre of the analysis of many landscape-scale models (Ruiz Zapatero 2011). Research such as this has led to the recognition of a trend in the British Isles and beyond, towards enclosure over the course of the first millennium BC which can be seen both in terms of the changes to many settlements and also in the ways in which the landscape is divided up and conceptualised. The process of enclosure would appear to begin around about the same time as the decline in the supply of Bronze from the continent, and also to relate to an increasing focus upon agricultural production (Thomas 1997). In a similar manner to the changing interpretations of the brochs, the purpose of this process of enclosure has shifted and been debated, often being explained in functional terms such as the exclusion (or inclusion) of livestock, or the need for defence, whilst the symbolic and social role of enclosures has also been considered (Bowden & McOmish 1987). Whilst the practibility of functional interpretations would be heavily dependent on the nature of warfare and variations in agricultural practices, what is clear is that many communities seem to have been emphasising the differences between them by monumentalising the outer limits of their settlements and imbuing them with special significance through the deposition of a variety of items (Bradley 2007, 237). This creation of increasingly reinforced boundaries inherently
resulted in the creation of an inside and an outside, and therefore insiders and outsiders (Thomas 1997) as well as the potential for trespass and perhaps violent transgression of these boundaries (Giles 2007c, 247). Clearly boundaries cannot have been the sole driving force behind the development of boundaries, and one would imagine a reciprocal relationship between the construction of boundaries and the social changes. Changing agricultural practices also need to be considered in this mix, with an apparent shift to more intensive agricultural practices having an impact on the perceived value of land as property (Barrett 1994, 143-144; Thomas 1997) and in turn on ideas of inheritance and kinship (Armit 2002; 2005b). Of course as Thomas (1997, 216) recognises such a general explanation of the rise of enclosure will obscure the complexities of the societies and the intricacies of the processes of social change and in some areas, such as the south-east of Scotland, the pattern may be more dynamic and complex than a linear model of progression and improvement (Harding 2001).

Although later prehistoric field systems and land divisions have been identified in Atlantic Scotland (e.g. Lamb 1983; Carter 1993; Johnston 2000; Turner et al. 2004), these are less common in the island locations where the creation of boundaries seems focused much more closely upon enclosure of the domestic structure itself rather than the whole settlement. Staff from a number of British universities in particular Bradford and Sheffield have led a variety of landscape-based projects in the Scottish islands. Walkover survey has been key to many of these projects, particularly on the Western Isles (Armit 1994; Branigan & Foster 2000; Parker Pearson 2012a), these have often been a means of establishing a baseline of archaeological knowledge, or as a preliminary to more site specific excavation (see Hunter 1996 for a good example of the former). In contrast such survey has been mainly absent from more heavily cultivated areas such as Orkney and parts of Shetland with the focus instead upon large-scale excavations such as Old Scatness, Shetland, which have considered the landscape through the proxies of floral and faunal remains (see below). The Scottish islands have undoubtedly been a key area of research, contributing
important excavation publications such as Dun Vulan (Parker Pearson & Sharples 1999), Howe (Ballin Smith 1994) and Old Scatness (Dockrill et al. 2010; in press), and the area is well served with models of prehistoric agricultural economies (e.g. Dockrill & Bond 2009). The majority of these approaches have somewhat unconsciously reinforced interpretations of brochs as isolated within the landscape. This implies a model of islands of culture amidst a natural backdrop, although there are exceptions such as the wider survey of the landscape at Tofts Ness, Sanday (Dockrill & Gater 1992; Dockrill 2007) and the consideration of the experience of dwelling in different parts of the Outer Hebridean landscape (Rennell 2010).

As noted above agriculture appears to have played a central role in later prehistory, but it has only been comparatively recently that large-scale environmental sampling has provided the evidence with which to challenge the traditional divide of later prehistoric Britain into a stock raising ‘highland’ zone and an arable south (Bond 2002, 178). These models are now considered simplistic as across Britain there is growing evidence that a widening range of cereals and legumes were being exploited in sub-regionally variable mixed agricultural strategies (Ralston 1999, 504). There is also a shift away from the predominance of cattle in earlier prehistory so that by the end of the first millennium BC, sheep, generally farmed for meat, had become the most numerous species at the majority of sites in Britain (Albarella 2007), perhaps indicative of an increase in small-scale consumption that may reflect a move from large social gatherings to consumption focusing on smaller social groupings (Mulville 2008, 230-231).

Despite these general trends there remains strong evidence for regional variation, particularly in the north where assemblages from a number of broch sites in both the Northern and Western Isles show a high proportion of cattle and pig bones. Within the Late Bronze and Early Iron Age phases at Jarlshof, Shetland, sheep appear to have outnumbered cattle, and there was only limited evidence of pigs at the site (Platt 1956, 212). But a few centuries later at Scalloway,
Shetland the faunal remains associated with the broch (c. 100BC – AD500) suggest cattle and sheep were present in roughly equal numbers, with a smaller, but still significant proportion of pigs which further rose in the Late Iron Age phases (O'Sullivan 1998a, 109). In the case of Dun Vulan, South Uist the significant quantities of bone from young calves was interpreted as the product of a high risk dairy strategy (Parker Pearson et al. 1996) and although this interpretation of the mortality patterns has been critiqued (Gilmour & Cook 1998), lipid analysis appears to confirm that dairying was an established practice in the Western Isles during the Iron Age (Craig et al. 2005), and dairying, again based up slaughter patterns, has also been recorded at Scalloway (O'Sullivan 1998b, 128). In contrast, at Old Scatness, Shetland, a similar pattern of dairying is only found in the Late Iron Age phases (Bond 2002, 179-181), with evidence for beef cattle observed in Early and Middle Iron Age phases (Dockrill et al. 2006, 106).

Alongside research such as this into the faunal elements of agriculture in the Scottish Islands, the capacity for arable agriculture appears to have been a primary concern in determining the location in which to build a broch (Fojut 1982), with the dominant crop being six-row barley (ScARF. 2012g). An integrated methodology has been employed on a number of sites in Orkney and Shetland to explore the evidence for the intensive cultivation and management of heavily manured, ‘infield’ areas (Dockrill & Simpson 1994; Simpson et al. 1998; Guttmann et al. 2006), demonstrating that arable agriculture would have formed the ‘calorific backbone’ of a subsistence economy (Dockrill 2002, 158). There is some evidence that this arable produce was centrally stored as part of a wider socio-economic strategy (Ibid.), although the often cited example of the vast quantities of grain apparently stored in the roof at Scalloway, Shetland (Holden 1998, 126), likely dates to sometime in the 5th century AD (Sharples 1998, 86-87) and as such it is unclear whether this really represents the persistence of Middle Iron Age practices related to broch communities or newly developed Late Iron Age practices for the storage of arable produce. These findings have suggested that economic strategies in these perceived marginal areas cannot be
defined purely on the basis of the climate and productivity of the landscape. A broad mixed agricultural economy was employed, but within this system there appears to have been the potential to express power, status and social hierarchy through the control and distribution of both livestock and grain surplus.

Figure 2.3 – A stylized model of the resources and landscape in the Northern Isles (Dockrill & Bond 2009, Fig 11)

In contrast to the cultivated crops, evidence from across the British Isles suggests that during later prehistory wild animals were generally sparsely but persistently exploited; this has been seen as evidence of certain proscriptions against these wild resources (Mulville 2008, 232). Such suggestions perhaps speak to an increasing perception of a divide between the cultural and the natural, and therefore about the relationships between people and the world around them. However these proscriptions seem to have not extended to coastal sites and island communities where wild terrestrial species were exploited to a much greater extent (Ibid. 234). This is
particularly true of marine resources, notably fish and seabirds, where the meagre evidence for their consumption across most of the British Isles is in sharp contrast to the significant role they appear to have played in Western and Northern Scotland (Willis 2007) although it should be noted that at least in the Later Iron Age marine resources still did not form a significant proportion of diet (Barrett & Richards 2004). Nor apparently did these taboos extend to plant material, with peat, heather and bracken being collected from the newly developing heathlands in the hinterland of Iron Age sites such as Dun Bharabhat, Lewis (Ceron-Carrasco et al. 2005, 226).

Further evidence of the relationship between people and their wider environment may also be found in the ways in which some pottery was being decorated; the tools used to produce impressions, such as cords perhaps derived from lime trees or hemp, twigs, reeds and bones, may have been gathered in the wild and thus perhaps symbolising particular places or ecological zones (Woodward 2008, 297).

Anthropological and post-processual approaches have recognized the importance of the agricultural cycle and the symbolism of fertility in human-environment relationships in later prehistory (Barrett 1989; Parker Pearson 1996; Fitzpatrick 1997). However many of these interpretations have been somewhat uncritically accepted and it is only comparatively recently that some of these themes have been revisited and explored in more detail. William’s (2003) brilliant analysis of the agricultural cycle as a metaphor, suggests that social reproduction was centred and structured within the unchanging cycles of agricultural production. Detailed analysis of the animal bone and pottery from the wheelhouse at Solla, North Uist, has also suggested that different animals, both wild and domesticated, may have been treated and conceptualized in different ways (Campbell 2000). Boundaries have also been interpreted in terms of the conditions through which social relationships were generated, rather than as a plan of these relationships (Giles 2007c). Although comparatively few in number these approaches have moved beyond purely economic models of the world, to stress the indivisibility of people and place, and that the
structuring principles and knowledge of how to live in a landscape with others were learnt through continual inhabitation which would have been reworked and modified by different individuals and social groups over time.

The essentialism that underpins much of the research in Atlantic Iron Age Scotland has had a significant impact upon our understanding of the landscape. Monuments, sites and objects need to be at least partially constituted by their relationships to one another and to the ‘natural’ elements of their surroundings, rather than landscape archaeology being a process of dropping pre-constituted, typological ‘objects’ into a spatial-temporal context (Baines 1999; 2004). This increasing shift from typological to relational approaches, similar to that in the work of Giles (2007c) and Williams (2003), has shown considerable potential in exploring the landscape as something more than a passive backdrop to socio-economic models. Instead the environment becomes the medium through which social relationships and identities are constructed and reworked, and has important implications for the natural-cultural relationship and the structuring cosmological principles which will be discussed in more detail in Chapter 3.

2.4 SUMMARY

This chapter identified and critically explored three key themes: the development of research in the Scottish Iron Age, the central role of architecture, and the manner in which landscapes have been considered. The evidence and interpretations that has been summarized above forms the foundations upon which the following chapters and detailed study will be based. However as has been highlighted many studies of the Scottish Atlantic Iron Age remain situated within functionalist and essentialist models, a legacy of culture-history approaches. Such models implicitly see material culture, including architecture and the landscape, as reflecting the processes and cultures that created them, rather than taking an active role within social practices.
As such there would appear to remain considerable scope for attempts to address the challenges set out by Barrett in 1981.

The study of the key forms of late prehistoric domestic architecture in the region has, for more than a century been driven almost exclusively by efforts to refine classificatory and chronological systems, and to identify the geographical origins of these monumental structures. The view that brochs must have developed in one area and then spread throughout the Atlantic region and beyond clearly has its origins in the diffusionist paradigm of the first half of the twentieth century. This in turn can been seen to closely relate to ideas of regionality, which much like other interpretations developed in relation to the Iron Age in southern Britain have a more problematic application in the north. Perhaps most significantly the emphasis on architectural typologies has resulted in a focus on individual monuments and a separation of sites from their landscapes. The considerable body of research into the agricultural economy and the nature of the environment during later prehistory has provided valuable insights. However the abstraction of sites from their context results in the landscape being viewed as a passive backdrop, modified by the people which it contains, rather than representing an dynamic actor with which relationships are created and reworked. In an attempt to work towards a contextualized and relational archaeology of social life in Iron Age Atlantic Scotland, the following chapter will move away from a focus upon the physical characteristics and classificatory systems to consider the ways in which landscapes and the spaces and places in which humans dwell, can be studied.
3 CHAPTER THREE: APPROACHES TO THE LANDSCAPE

In the preceding chapter I presented a summary of the history of research into the later prehistoric period in Atlantic Scotland, and in doing so highlighted the predominant view of the landscapes of the period and region as a passive backdrop to human activity. This chapter goes on to consider other ways of conceptualizing past landscapes, centred upon the importance of embodied and experiential perspectives of the worlds in which people dwelt, and the theoretical and methodological approaches that can be utilized to investigate and interpret such archaeological landscapes within two Orcadian case-studies. The chapter concludes by reflecting upon the ways in which the superficially distinct and mutually exclusive datasets which result from such qualitative and quantitative approaches can be integrated, interpreted and represented to provide alternative narratives of the people and landscapes of Atlantic Scotland during the first millennium BC.

3.1 SPACE, PLACE AND LANDSCAPE

Discussion of past landscapes are prevalent in archaeological literature, and cover everything from empirical reports on measured survey, to theoretical considerations of the nature of landscapes in the past that on occasion can veer into the esoteric. Such diversity reflects the variety of work that is being conducted, but also highlights the potential for disagreements between different schools-of-thought as to what we mean by ‘landscape’ or a ‘landscape perspective’ and how best to study it (Johnston 1998; Johnson 2007). Concepts and definitions of landscape have been particularly widely explored within contemporary geography (Rodaway 1994, 126-133; Johnson 2007, 2-4) which has identified three basic views of what a landscape is. The first considers the idea of landscape as a way of seeing the world; cultural images that represent or symbolize a person’s surroundings (Daniels & Cosgrove 1988) and the cognitive systems and processes of perception through which the landscape is understood.
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(Johnson 2007, 4). Such a position views the landscape then as a mental construct – the landscape in our mind, and without the human mind to understand it these landscapes cannot exist. In sharp contrast then are ideas of landscape centred upon a tangible realm of material things; the physical features which exist ‘objectively’ and form the contexts of human behaviour (Johnson 2007, 3; Thomas & David 2008, 20), and which exist independently of the human mind. This landscape ‘outside of our heads’ is perhaps superficially easier to understand as a physical ‘thing’, but in separating the mental understanding of the landscape from its physical experience the two concepts of landscape are in essence incompatible. A number of authors have rejected the distinction between inner and outer landscapes, arguing that this is a product of the Western tradition of thought and that many ‘indigenous’ cultures do not recognise such a dichotomy or simply reject the underlying Cartesian system of thought that sets the opposition up in the first place (Olwig 2003, 874; Johnson 2007, 4). This third alternative comprises a more diverse set of concepts but generally starts from a position which rejects a distinction between mind and body, and between physical and mental landscapes. Instead the world is understood as a socially and culturally active and meaningful realm of discourse in which humans engage (Lowenthal 1961; Olwig 2003; David & Thomas 2008). Most notably, Ingold has posited the term ‘taskscape’ – the socially constructed space of activity – of which the landscape is a congealed form, constituted from the lives and works of past generations who have dwelt within it (Ingold 1993; 2000), and it is this view of landscape which underpins my research.

Within such an understanding of the world in which people dwell, it is insufficient to interpret monuments on the basis of archaeological typologies that separate sites from their position in the world, or at best situate them in a passive and homogenous landscape (Baines 2004). It is only by thinking about space relationally that we can view the landscape as a product of practice, trajectories and inter-relations (Harvey 2010, 361). Academic interest in the
relationships between people and space extends across a wide range of disciplines including geography, architecture, anthropology and archaeology, resulting in a vast body of literature but of particular interest in the context of the research presented in the following chapters are the works of Christian Norberg-Schulz, Edward Relph and Yi-Fu Tuan on space and place, and of Michel de Certeau and Tim Ingold on dwelling.

The work of all of these writers draws to some degree upon the phenomenology of Heidegger and Merleau-Ponty. As a philosophical approach phenomenology centres upon embodied experience of the world and provides a means of considering the relationships between people, nature, landscapes, buildings and places (Seamon & Mugerauer 2000). The philosophy of phenomenologists, most notably Heidegger and Merleau-Ponty, has been extremely influential in promoting embodied experience and being-in-the-world as a central means of understanding landscapes (Ingold 2000, 168), challenging Cartesian dualisms of mind and body, and suggesting that self and world merge through the act of dwelling (Tilley 1994; Moore 1996, xi; Ingold 2000, 169; 2004). In taking such a perspective of being-in-the-world rather than viewing the world, there is an inevitable shift towards thinking about how that world is perceived; this was a central aspect of Merleau-Ponty’s (1962) work and is of course fundamentally culturally dependent and differs from person to person (Tilley 2004, 10-12; Frieman & Gillings 2007, 8). Heidegger’s concept of dwelling implies a meaningful engagement with environments of which we are fundamentally a constituent part; people do not exist separately from their world, and nor do they impose order on an abstract and homogenous space (Heidegger 1971; Norberg-Schulz 2007). As Tim Ingold convincingly argues, we do not dwell within our environment because we have built but rather it is in the process of dwelling that we build (see also Norberg-Schulz 1980, 5; Ingold 2000, 172-188; Cloke & Jones 2001). This dwelling is of course fundamentally mediated through the human body, both as the site for all the senses and as our primary means of movement (Rodaway 1994, 31), and as such the
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worlds which are constructed, perceived and reworked are based upon movement, activity and pause.

It is through this process of dwelling then that we create the world in which we live, but in human experience the meaning of space often merges with that of place and they require each other for definition; space allows movement and freedom, whilst pausing provides stability and allows the creation of place through familiarity and the endowment of meaning (Tuan 1975, 164-165; 1977, 6). This place-making, whether in the imagination or on the ground is the product of everyday experience and practice; of walking, working, encountering other people and animals, and engaging with the surroundings (de Certeau 1984; Gray 1999; Cloke & Jones 2001; Ingold 2004; Olwig 2006; Pink 2007). Space then is the situational context constructed by and for human action, whilst places are the centres of human significance and emotional attachment where life occurs (Norberg-Schulz 1980, 5; Tilley 1994,15; Gray 1999; Norberg-Schulz 2007, 129). Ingold has suggested that places have no boundaries, ‘in journeying from place A to place B it makes no sense along the way to ask whether one is still in A or has crossed over to B’ (Ingold 1986, 155). However it is possible to be in a place, and thus I would suggest that even if they are solely conceptual or even incomplete, places must have an edge. Indeed the architect Christian Norberg-Schulz suggests that the phenomena of place can be analysed by means of two categories: space and character – the former conveys the dimensional organisation of the elements that make up the place, whilst the latter denotes the atmosphere and general sense which is the most important property of defining distinct places (Norberg-Schulz 1980, 11). Such a ‘spirit of place’ or genius loci considers the distinct character of a space in terms of both the tangible – for example the character of the stone or brick from which a building is constructed, and the intangible – for example varying times of day or year, and different weather conditions (Norberg-Schulz 1980; 2007).
For Norberg-Schulz there could be no single definitive and correct *genius loci* of a place; it is the product of different people, with different numbers and durations of experience, at varying times of day or year and in different weather conditions (Norberg-Schulz 1980, 14). These different experiences also highlight the temporal nature of place; to develop a true sense of place requires time (Tuan 1977, 183-185) for the memories of past experiences to be mingled with those of the present, stories to be attached to landscape features, and a sense of shared history rooted in the past and memorialised in the present to develop (Tilley 1999, 178-183). Through repeated experiences and the understanding of the temporal depth it is possible for people to develop a considerable degree of familiarity and attachment to a place, this is what Relph (1976) has defined as *insideness* – an increasing sense of understanding which enables a different perception of a place. This has important implications when considering questions of identity as the more profoundly inside a place a person feels then the stronger their sense of identity with that place, and sense of comfort and belonging will be (Seamon & Sowers 2008, 45-46) and Relph goes on to distinguish between different levels of insideness, noting that ‘that the most fundamental form of insideness is that in which a place is experienced without deliberate and selfconscious reflection yet is full of significances’ (Relph 1976, 55).

The majority of archaeological investigations maintain a fundamental conceptual division between natural space and cultural space, and within cultural space, architectural space – that is spaces defined through buildings – is often singled out for even more detailed study. This extends from classic studies such as Bourdieu’s analysis of the Berber House (Bourdieu 1970), through to the strong focus upon the spatial ordering of later prehistoric roundhouses (e.g. Foster 1989; Parker Pearson 1996; Cutting 2006; Pope 2007; Webley 2007). These divisions provide useful boundaries of study, but is key when considering the landscape to remember that these are modern artifical divisions, which are a product of Western philosophy.
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(Lowenthal 1961; Ingold 1993; Edmonds 2006). Architecture can alternatively be considered as part of the wider environment, merging with the landscape of which it is part (Johnson 1994, 174) and simply representing another type of space (Tuan 1977, 101-117). This dichotomy between culture and nature is further blurred when we consider that what we select from nature to serve our purposes, we also call architecture (Norberg-Schulz 1971, 37). Indeed any feature within our environment can be considered more or less like a building, dependent upon the extent that the human component prevails, to use Ingold’s (2000, 187) example a tree growing deep in a forest appears ‘natural’ whilst the same tree, carefully tended as part of an ornamental garden, can be considered a part of the built ‘cultural’ environment.

Similarly there remains an often implicit separation between land and sea in many considerations of the landscape. Much of the consideration of the sea has concentrated on the shoreline as a boundary between land and sea (e.g. Pollard 1996; Van de Noort 2003), and whilst there is clear value in exploring these liminal zones, the result has been that the archaeology of coastal landscapes has concentrated on the dry edges – viewing the sea from the land (Cooney 2003, 323) rather than exploring the ‘liquid plains of the sea’ (Braudel 1992, 65). Such perspectives identify the sea as fundamentally different, and ‘other’; with notions of the marginal and wild nature of aquatic habitats being deeply embedded in the history of Western thought (Flatman 2003; Erlandson & Fitzpatrick 2006, 6; Lambert et al. 2006). However historical, archaeological and ethnographic research from Norse Scandinavia (Bertelsen 2005), Indigenous Australiian peoples (McNiven 2003; Morphy & Morphy 2006) and the Roman world (Horden & Purcell 2000) all provide views of the sea, the relationships between land and sea, and the ways in which the maritime environment was navigated which are very different to modern Western ideas. Particularly in coastal areas, and groups of islands the sea is central to the way of human life, forming both a barrier and a mechanism for travel and interaction (Cooney 2003; Erlandson & Fitzpatrick 2006, 14; Rainbird 2007). The concept
of the ‘maritime cultural landscape’ (Westerdahl 1992; 2011, 337-340) provides a useful
means of breaking down some of these divides, recognising that parts of a maritime world –
harbour, shipyards, lighthouses etc. – can be found on land, and conversely parts of the
terrestrial world, notably the wood that many ships are constructed from, may be utilised and
understood differently at sea (Westerdahl 2005).

This is not to minimise the role of architectural or indeed maritime spaces. It is important to
highlight the potential for people to understand the divisions between elements of their world
in different ways. However these parts of the landscape do possess different characteristics,
and I would suggest can be viewed as distinct places, even if they may have been understood
in ways that differ from modern Western conceptions of architecture and the sea. Whilst these
places are then not necessarily separate from the rest of the human landscape, it is clear that
the physical definition of space and place creates a more tangible world which articulates
experience, heightens awareness and which is more readily classified and controlled (Tuan
1977, 100; Parker Pearson & Richards 1994, 24). The physical presence of a boundary does not
of course imply its conceptual maintenance, and nor does a conceptual boundary always
require a physical counterpart, but the use and control of space is a potent means for the
expression and negotiation of social relations (Bender et al. 2007, 307). Spaces are used and
understood through practices and with reference to an a priori set of implicit cultural
knowledge (Bourdieu 1977; Moore 1996, 83-93), but not all spaces are simply inscribed
through repeated practice. For de Certeau (1984) power is about territory and boundaries,
through the use of classification, delineation and division (strategies) the powerful exert
influence and social control, whilst the weak use movement, short cuts and routes (tactics) to
contest this spatial domination (Low & Lawrence-Zuniga 2003, 31-32). Although de Certeau’s
concepts were developed and applied in relation to urban spaces, they can also be found in
the countryside (Gray 1999; Olwig 2006, 27-29). Walking provides a particularly good example
of the use of de Certeau’s tactics (Vergunst 2010, 379) and highlights the nature of social influence that the use of boundaries can have. Walking in a space where there are other people inevitably involves social encounters (de Certeau 1984; Pink 2007) and encounters with different rhythms and times (Edensor 2010; Vergunst 2010). Therefore the ways in which movement is controlled and space is organised reflects the conditions through which social relationships and meaning are generated and maintained (Moore 1996, 81; Giles 2007c, 110), and it is this perspective that will be employed in considering the prehistoric spaces that will be discussed within this research.

3.2 QUANTITATIVE APPROACHES TO THE LANDSCAPE

The origins of landscape archaeology in Britain can be traced back to the early antiquaries of the 17th century but it was not until the post-war period that landscape as a spatial unit of analysis was employed alongside a consideration of chronological depth (Thomas 2012, 167). This can be attributed to a group of intellectual contemporaries in the 1950s (Johnson 2007, 63-68). The work of O.G.S Crawford is notable for outlining in his book *Archaeology in the Field* (1953) an approach to archaeology that did not involve excavation but instead utilised aerial photography, Ordnance Survey mapping, and documentary evidence to concentrate on particular locales (Johnson 2007, 55). In turn the influence of this work can be clearly identified in the works of W.G. Hoskins, notably *The Making of the English Landscape* (1955), who is almost universally reverred as the father of British landscape archaeology. The term ‘Landscape Archaeology’ itself was not coined until some two decades later with the publication of a book by the same title by Trevor Rowley and Mick Aston (1974), and the influence of Hoskins’ background as an economic and landscape historian in works such as this and Aston’s later and oft-cited *Interpreting the Landscape* (1985) is clearly identifiable and continues to exert a strong influence in landscape archaeology today.
These approaches to the landscape are firmly enshrined in an empirically driven and normally atheoretical school of thought whose central premise is the importance of fieldwork. Such fieldwork takes the form of a range of non-intrusive survey techniques. Traditional field, or walkover, surveys might be undertaken to provide a baseline inventory of the distribution and nature of sites within a region, perhaps to inform future management strategies (McOmish et al. 2002, xii), to uncover the logic behind the location of sites (Bradley et al. 1994, 344) or to provide the background to further work (Schiffer et al. 1978; Halliday & Stevenson 1991; Bowden 1999). Almost regardless of the questions being asked, these surveys will combine analysis of documentary evidence (including maps and aerial photography) from national and location archives and Sites & Monuments Records together with non-intrusive surface examination (Bowden 1999, 23-26) with the aim of creating an objective record of the location of sites and monuments. Such research tends to result in substantial gazetteers of sites together with a selection of two-dimensional plots of site locations shown as variously coloured or shaped dots on a map. Although widely understood by the archaeological community, the simplicity and appeal of these maps, alongside the aerial photographs and hachured plans which are also commonly employed, inscribes the gaze, particularly the vertical perspective, as an all powerful tool for understanding the landscape (Johnson 2007, 84). The visual examination is seen as somehow beyond critical deconstruction, and whilst the skill of fieldworkers is undoubtedly developed and refined over many years, implicit in this position is an enduring empiricism of gut feelings and common sense (Johnson 2007, 82). This kind of organised sampling ultimately aims to make the unknown known by assembling data collected from multiple locations into a comprehensive survey (Ingold & Vergunst 2008, 6) which reflects what was done to the landscape rather than considering how landscapes worked on a human scale. Such a perspective implicitly ignores the fundamentally subjective nature of practices which are so dependent upon individual perception and experience, as well as biases that result from particular equipment and methodologies (Bradley et al. 1994; McOmish et al.)
2002, 160; Brophy 2005) and also more problematically assumes that the peoples from the past that we study were essentially the same as us (Johnson 2007, 82). Despite this these techniques do provide a key means of considering the archaeological landscape, although there is clearly then a need for a greater critical awareness of how we know what we know (see Aston 1985, 13) however to move beyond the implicitly empirical description to consider the ways in which people dwelt in these past landscapes, additional layers of data and interpretation are necessary.

Whilst field survey techniques are well-established geophysical survey has developed as a suite of techniques applied to archaeological material over a relatively short period of time since the end of the Second World War (Gaffney & Gater 2003, 16-20) and a number of pioneering experimental surveys were undertaken in Orkney during the 1970s by the Ancient Monuments Laboratory at English Heritage and the University of Bradford. Some initial attempts were made to integrate archaeological geophysics into more theoretically aware and research-driven debates within archaeology (Gaffney & Gater 2003, 21; Kvamme 2003), but these survey techniques have primarily been employed as a method of prospection, prior to commercial excavation or as the first step of a larger project rather than truly approaching survey with specific landscape based questions. Whilst some American geophysicists have recently been attempting to better situate geophysical techniques within research agendas and coherent bodies of theory (Conyers 2010; Thompson et al. 2011) developments in Europe have tended to be more technical or methodological in nature.

What is presented as an interpretation of geophysical survey data is often a reading rather than a full interpretation. The results are laden with technical terms of anomalies, trends and responses rather than giving an actual archaeological interpretation. This is at least in part a product of the important role that commercial geophysics has played in the development of the discipline in the British Isles (Gaffney & Gater 2003, 21-23) which has led to a caution to
commit to particular interpretations which might have an impact on the cost and timescale of construction projects. An additional layer of interpretation is sometimes added at a later concluding stage that might suggest an archaeological explanation of the data, these tend to be tentative and with multiple caveats. Despite these issues there is clearly a growing awareness of the potential of geophysical techniques beyond prospection and the ability to investigate aspects of sites, such as the presence of hearths and middens, which are not easily detected with other non-intrusive techniques. Geophysical techniques can also investigate the unique characteristics of individual sites, rather than forcing them into classificatory scheme with inherent assumptions of function and chronology (Poller 2006, 153).

The most significant strength of many of these geophysical techniques is the scope they provide for large-scale landscape coverage. Multiple phases of research in two areas; the Vale of Pickering, North Yorkshire (Powlesland et al. 1997; 2006; Powlesland 2009) and Stonehenge, Wiltshire (Parker Pearson et al. 2006; Gaffney et al. 2012) covering several sq. km each, provide ample evidence for the potential of extremely large-scale coverage by geophysical techniques. Much of this work, in common with many other large-scale research surveys, have developed in a somewhat fragmentary fashion often working outwards from certain sites or areas, and The Stonehenge Hidden Landscapes Project is innovative in its intention to explore the landscape as ‘an undivided three-dimensional space’ from the outset (Gaffney et al. 2012, 149). Increasingly these research projects are making use of multiple techniques of both ground based geophysical survey, and remote-sensing and aerial photography (e.g. Bewley et al. 2005; Powlesland et al. 2006). The datasets which result, are increasingly complex, and exist primarily in a digital format, often taking up many gigabytes of memory on the servers of large commercial and research institutions, and present a separate set of challenges in visualisation and interpretation (Gaffney & Gaffney 2006).
Chapter Three: Approaches to the Landscape

Landscape archaeologists are increasingly having to become highly computer-literate (although again there is often an unfortunate separation between the technical staff who collect and manage the data, and those who interpret it), and this has seen the increasing prominence of Geographical Information Systems (GIS) and other related software in archaeological research. In addition to providing a means of managing these datasets, the growing role of GIS in archaeology has provided considerable scope for detailed spatial analysis to be undertaken. This builds on a long history of quantitative methodologies in archaeology that proved particularly popular during the 1970s and 1980s, and more recently there has been renewed interest in techniques which focus on exploring patterns, clustering and the relationships between sites and their locational characteristics and how they change through time and space (Conolly & Lake 2006, 149). A simplistic example might be an analysis that seeks to clarify the relationship between site location and soil type, together with tests to establish the probability that the sites are not randomly located with regards to the soil type, and although analysis of site patterning against a single variable like this is rarely informative of past behaviour, the examination of multiple variables against site location can provide insight into the choice of location for settlements (Conolly 2008, 587). Another area in which GIS have proved particularly popular are the development of ‘viewshed’ models, which, put simply, are calculations of the potentially visible areas from particular parts of the landscape, and have shown much potential for understanding the relationship between ‘viewscapes’ and landscape features such as monuments and pathways (Witcher 1999; Lake & Woodman 2003; Llobera 2007; Conolly 2008, 589-590; Gillings 2009) and have also been expanded to consider environmental reconstruction, for example in the visibility of rock art and monuments in Kilmartin Glen (Winterbottom & Long 2006).

The totalised nature of knowledge assembled in GIS whilst incredibly useful does not lead directly to an understanding of the social landscape. It is only through considering the presence of people within the landscape that meaningful interpretations can be put forward
(Thomas 1993, 26; Conolly & Lake 2006, 42-43). It is in this aspect that GIS based visibility analysis and predictive modelling have been widely criticised as deterministic and de-humanising, with modelling often based upon questionable assumptions or detached from contemporary theoretical concerns (Philips 2004; Wheatley 2004). Conversely, of course, suggestions that GIS models can provide formal support for the logical but uncorroborated statements that have been made by a number of theoretical archaeologists implicitly reinforce the primacy of ‘objective’ scientific data and assume that the work of archaeologists who draw on phenomenological ideas lacks rigour. Geographical Information Systems offer a means of managing and characterising the increasingly large datasets that the result of quantitative approaches to the landscape. These methodologies have been developed by archaeologists as a means of negotiating our engagements with material remains (Baines & Brophy 2006, 78) and whilst interpretation starts from the moment archaeological data begin to be collected, there is clearly variation across different projects, individuals and sub-disciplines as to which observations are recorded (Hodder 1997, 693; Bradley 2006, 4-5). This is particularly true of many of the non-intrusive landscape scale techniques commonly utilised in the British Isles, in which data are often generated by specialists in geophysical techniques or field survey, but the final synthetic and interpretative layer is undertaken by other archaeologists.

### 3.3 QUALITATIVE APPROACHES TO THE LANDSCAPE

Qualitative approaches to landscape archaeology centre upon the consideration of the ways in which people experienced, and experience, the world. The application of phenomenology in archaeology was pioneered by the influential *The Phenomenology of Landscape* (Tilley 1994) and the ideas presented by Tilley have been adopted and developed by a number of landscape researchers (e.g. Brophy 2000; Cummings *et al.* 2002; Hamilton *et al.* 2006; Gillings 2011). Many of these approaches identify themselves as explicitly phenomenological, but it is becoming increasingly tenable to take an interest in human experience and subjectivity,
Chapter Three: Approaches to the Landscape

without formally deriving such a position from a detailed reading of phenomenology (Johnson 2012, 275).

Christopher Tilley’s book whilst influential was provocative at the time and remains the key focus of many critiques. Such critiques normally focus on two areas; that phenomenology lacks scientific rigour and its results are impossible to verify (e.g. Fleming 1999; Llobera 2001; 2006); and that modern archaeologists cannot hope to have the same experiences as people would have had in the past. In response to the latter point we can of course argue that all archaeological practice is undertaken in the present, and indeed the identification of earthworks as barrows, field systems and the remains of post-medieval settlements, by traditional landscape archaeologists, is in itself an enskilled experience of the landscape. But the criticism perhaps also misses the point of the approach, the experiences of everyday life are known but typically go unnoticed beneath the level of conscious awareness – one of the great strength of phenomenology is to seek out what is obvious but unquestioned (Seamon & Sowers 2008, 44) and by explicitly considering such experiences phenomenology provides a means of reconsidering the social significance of landscapes and concepts of personhood that are very different to modern Western models (Brück 2005, 65).

There are of course issues to be addressed when recording our experiences of the landscape. Although some consideration of other senses have been undertaken; for example the acoustic properties of megalithic tombs (Watson & Keating 1999) and outdoor spaces (Hamilton et al. 2006), and the textures and haptic qualities of Neolithic tombs (Cummings 2002; 2012) and artefacts (MacGregor 1999), the emphasis remains on the visual experience of the landscape. Important points have also been raised about the need to consider the impact that flora may have had upon visibility and experience (Chapman & Geary 2000; Davies et al. 2005). The assumption that there is a degree of shared bodily experience, and that the bodily experience of the modern archaeologist offers a way of grasping past experiences, which in turn enables
the meaning of the archaeological record to be understood (Barrett & Ko 2009, 280; Johnson 2012, 277) is a dangerous one; but of course it is impossible for the modern archaeologist to have a bodily experience through anything other than their own body. An uncritical acceptance of modern experience as a proxy for past experience would of course be inappropriate; phenomenological approaches are not attempting to encounter a past experience but rather to use the archaeologist’s body to engage with the material world in order to access a meaning. We must of course be aware of the dangers of assuming that our own subjective engagement with the material record must reveal something of the experiences of the people who inhabited these places in the past, but like many other critiques of phenomenology (e.g. Fleming 1999; 2006; Thomas 2012) there is a perception that a ‘subjective epistemology’ (Barrett & Ko 2009, 279) is fundamentally problematic and that the interpretations being made go too far beyond the evidence. Such concerns are ultimately grounded in the same fear of unrestrained relativism as was levelled at early post-processual thought, and whilst there are undoubtedly better and worse interpretations of the past, with few exceptions there is now a general acceptance that all archaeological data, regardless of how it has been collected, will in some way be biased, problematic and influenced by the social, cultural and political circumstances of the archaeologist.

The physical definition of a space, through the construction of boundaries, creates a tangible world that articulates experience, heightens awareness and is more readily classified and controlled (Tuan 1977, 100; Parker Pearson & Richards 1994, 24). The physical spaces defined by buildings and boundaries that are studied by archaeologists are not simply a map of past human relations, rather they represent the conditions which structured the creation and maintenance of such social relationships (Giles 2007c), and in order to understand these spaces as places, we must consider the practices, meanings and values which would have physically and conceptually formed them. The humanistic conceptions of place, as discussed above, describe ways of humans relating to the world (Cresswell 2008, 54), and the ways of
considering the senses of place described by Norberg-Schulz (1971; 1980) and Relph (1976), provide an elegant means of considering the variability of the human experience of a place, and the meanings which might be associated with it. Thus a stranger will experience a building differently to the person whose home it is, and this experience will also be affected by environmental factors such as the weather and the quality of the light.

Approaches to archaeological applications of phenomenology have become increasingly methodologically rigorous, with the development of techniques for recording the experience of archaeologists in the field (e.g. Hamilton et al. 2006; Rennell 2009), and also exploring means of integrating and analysing such datasets (e.g. Millican 2012; Rennell 2012), and these offer clearer means of ensuring consistency and beginning to address the variety of experience that may result from differences in age, gender and social and cultural background. Although taking a somewhat more overtly experiential approach to the landscape than some research into past landscapes, I would echo Johnson’s assertion that ‘we are all phenomenologists’ (Johnson 2012, 279), and suggest that phenomenological approaches represent another element of the archaeologist’s toolbox. These encourage archaeologists to take engaged stances in the world, interacting with landscapes and archaeological traces, and also reflecting upon our experiences and concepts of personhood (Brophy 2000, 45-50; Brück 2005, 65) and whilst we should be aware and conscious of potential issues this should not prevent their application.

### 3.4 INTEGRATING APPROACHES

The ‘traditional’ approaches to landscape archaeology, well represented by Historic Landscape Characterisation Studies (e.g. Rippon 2004), are rooted in atheoretical empiricism (Johnson 2007, 2) and emphasise what was done to the land rather than how people engaged emotionally, subjectively and variably (Bender et al. 1997, 148). In contrast the work of
researchers such as Barbara Bender, Richard Bradley and many others can be seen to sit firmly at the forefront of debate in archaeological theory (Johnson 2007, 2) and as Johnson goes on to highlight, the problem is not that one or other approach is fundamentally flawed, but rather that they are so utterly separate, and mutually ignorant of each other. Thomas (2008) has suggested that the two schools should not seek dialogue or engagement for the simple ontological reason that post-processual and traditional landscape archaeologists are looking at very different things. Thomas’ assertion overlooks the simple truth that for all but the most philosophical of landscape archaeologists, the techniques detailed in Section 3.2 provide a primary means of gathering data with which to explore past landscapes and there is already a degree of engagement, although this is often unfortunately in the form of data collected by technical staff and interpreted separately by other archaeologists. A significant degree of separation is still often visible, with datasets divided and separated through the specialist reporting styles that are typical of geophysical survey, palaeo-environmental investigations and the work other archaeologists and specialists who normally contribute to landscape research. This fragmentation is a feature of the practice of contemporary archaeology which has led both to separation of archaeological theory and scientific practice (Jones 2002, 42-44) and also the dry, unrewarding publications typical of many of the archaeological reports published today which has become a literary genre, maintaining disciplinary norms which are so long lived that they are taken for granted (Tilley 1989; Jones 2002; Bradley 2006). In the reflecting on quantitative and qualitative data there are then two, inter-related aspects to be considered; the methodological approaches taken to collecting and analysing these datasets, and the ways in which they are integrated when they presented to the audience.

One of the most innovative recent attempts to challenge these issues of fragmentation and traditional archaeological genres has been the publication of the programme of fieldwork and methodological innovation carried out at Leskernick (Bender et al. 1997; 2007). The variety of
this work means that some areas of research, such as the multi-vocality of the fieldwork and some of the imagery that is used to convey experiences of the Leskernick landscape, are more successful than others, but overall the work is ambitious and thought-provoking, an opinion that is widely shared (see reviews by Darvill 2009; Hicks 2009; Aldred 2010). Other researchers have also taken a more optimistic position than Thomas (2008) in explicitly considering issues of human experience and perception alongside tools such as GIS and aerial photography (for example Witcher 1999; Gillings 2009; Rennell 2010; 2012; Graves McEwan & Millican 2012) in the development of approaches and research that bridges the divide between the two schools of thought. Such approaches have been most successful where they have not attempted to directly analyse the emotional and conceptual geographies, but instead have considered the ways in which certain types of sensual encounter can be explored. Gillings (2009) in particular has highlighted the value not of simply developing more technically sophisticated approaches but rather that these approaches need to be driven by clear research aims and objectives. This underlines the importance of employing scientific techniques, such as geophysical survey, to provide detailed characterisations of certain aspects of archaeological material (Jones 2002, 21) rather than attempting to use them directly as interpretative tools. By refocusing the way in which we conceive and utilise these datasets it becomes easier to integrate them; a series of points recorded using GPS or Total Station along a wall do not simply provide a series of connected dots on a map, but instead informs us as to the size and shape of an architectural space, a photograph illustrating the colour and arrangement of the stone used to build it speaks to the character of the place and a narrative account provides detail of the experience of sheltering from the wind behind it.

The second area in which issues of fragmentation of archaeological practices and datasets has been problematic is in their presentation. Acts of writing about experiences, almost inevitably becomes acts of theorising rather than attempts to evoke the sense of place (Wylie 2005, 244;
Barrett & Ko 2009, 283-288). And in the representation of archaeological material and landscapes, there is an implicit understanding that there is a ‘real-world’ outside of the image (Wickstead 2009, 254). These are as such false images and simulations (Thomas 1993, 23-25) which results in continued efforts to produce increasingly ‘real’ or true images (Leibhammer 2000; Frieman & Gillings 2007; Fyfe et al. 2010). However rather than viewing representations as a necessary evil which is ancillary to the central act of experience and reflection (Llobera 2012, 501-502), the ways in which archaeologists present data can provide interesting opportunities to challenge some of the implicit assumptions common within modern Western society. This has led to recent calls for the development of non-representational ideas of archaeological imagery (Swogger 2000; Wickstead 2009; Hacgüzeller 2012) which echo and develop ideas posited by Michael Shanks in the 1990s that rather than produce images that faithfully replicate the visual phenomena of a part of the world, tools such as photography can be manipulated and used creatively to gain new perspectives and tell better narratives (Shanks 1992, 188-190; 1997). This is a reminder that the production of archaeological data, whether a photograph of a landscape, the excavation of a feature or the construction of a GIS, are dynamic performative acts rather than passive processes, which lead to the creation of material culture (Baines 2005, 185; Cripps et al. 2006, 26). Therefore rather than viewing the illustrations within archaeological publications as the last step of archaeological presentation, the creation, manipulation, visualisation and representation of data, whether GIS, photographs etc. should play an important and active role in the interpretation and development of understanding (Cochrane & Russell 2007; Fyfe et al. 2010; Lima 2011; Llobera 2012; Bailey 2014). This data and its manipulation can also extend beyond the image to include the ways in which archaeology is written to develop different, non-linear narratives (Shanks 2004; Holtorf 2008; 2010), and provides a means of breaking down the barriers, and better integrating text and image.
3.5 SUMMARY

In Chapter 2 I outlined the areas which had formed key foci of research of later prehistory in Atlantic Scotland. In particular there has been a significant emphasis upon architectural features, which has come at the expense of detailed consideration of the landscapes that these buildings are part of. Although a considerable body of environmental and economic data has been collected, this tends to position the landscape as a passive and natural backdrop to a cultural world of people and brochs. In an effort to address this, in the following chapters I will explore, in two large case-study areas, the ways in which these later prehistoric landscapes were dwelt in. The following research will be underpinned by the fundamental importance of an experiential perspective of the world, and the centrality of concepts of space and place, rather than landscape (see Johnston 1998) in understanding the ways in which people structured and understood the world in which they dwelt. I have outlined above a theoretical understanding of the ways in which spaces are defined, places created, and the relationships between people and between people and the world are generated and reworked. I have also explored the quantitative and qualitative techniques which will be utilised in an effort to identify such places, spaces and relationships within the Orcadian landscape.

Rather than being neutral atheoretical tools, the survey techniques, analytical software and methodological approaches to data collection, both qualitative and quantitative, are all means of thinking about the archaeological landscape. Non-representational images and alternative narratives provide a means not only of reconsidering interpretations of the archaeological material and landscapes, but also offer an opportunity to reflect on contemporary archaeological practices. Rather than viewing the implicit artificiality of these visual and textual representations as a weakness, the ability to manipulate images and view data is viewed as a strength. Such approaches can provide the means to view experience and indeed dwell in digital worlds in ways that would not be possible in ‘reality’ (Cripps et al. 2006, 34). This
provides the potential for different patterns to be encountered and recognised and for more active engaged responses to be elicited from the audience. Rather than seeing a divide between the collection and analysis of data, all stages of the interpretative process – creation, manipulation, visualisation and the representation – will play an active part in the ways in which the later prehistoric landscapes of Orkney will be explored and interpreted.
Chapter Three: Approaches to the Landscape
4 CHAPTER FOUR: INTRODUCTION TO THE CASE STUDIES

This chapter serves the dual purposes of both outlining the rationale and methodology behind the fieldwork, and also introducing the study areas, both physically and historically, which form the core of this thesis.

Given the landscape survey basis for this research it was important to identify appropriate areas of Orkney to form the focus of fieldwork. These areas were chosen in an effort to include as full a range as possible of the geomorphological variation found with the archipelago, and also to explore both uncultivated upland areas and cultivated agricultural landscapes. Given the later prehistoric focus of research it was also felt prudent to include areas with at least some known sites relating to the first millennium BC, although as will be discussed below (Section 4.2) and later in Chapters 5 and 9 the amount of previous investigation varies widely between different areas of Orkney. In order to cover as representative a range of terrain as possible, two transects were identified, these were:

- Yesnaby-Skaill – a strip (at its greatest extent 4.8 x 2.2km) running approximately north–south along the west coast of mainland Orkney. The study area covers approximately 750 hectares within the parish of Sandwick, stretching from the well-defined uplands to the south of Yesnaby, to the approximate centre of the Bay of Skaill in the north.

- Eynhallow Sound – a rough transect, running from the Evie hills, across Eynhallow sound to the interior of the island of Rousay. This encompasses two parishes, Evie on mainland Orkney, and Rousay which forms the north side of the sound, and excluding the marine element covers just over 400 hectares. The island of Eynhallow, covering a further 72 hectares, was surveyed in 2007 (Moore & Thomas 2008) and the results will be integrated with those from the current research.
Chapter Four: Introduction to the case studies

The total area of these case-studies represents a sample of a little over 1.2% of the total area of Orkney. There are a wide range of pasture and arable cultivation, as well as upland zones with hilltops extending well above 100m OD within both study areas. In addition to elements of two freshwater lochs the study areas include a wide range of different coastlines – sea cliffs, sandy beaches and rocky shorelines – which face both the open Atlantic and the other islands within the archipelago (see Figure 4.2 & Figure 4.3). The precise edges of the survey areas (Figure 4.4 & Figure 4.5) were pragmatically defined by the coastline and field boundaries located most closely to the edges of the transects. Where no physical boundaries existed, namely in upland areas, natural features such as ridgelines and burns were utilised, where necessary being recorded using handheld GPS for the purpose of illustrating the extent of investigation. The physical landscapes and the history of these areas will be explored in more detail below.

4.1 THE PHYSICAL LANDSCAPE

Lying just off the north coast of mainland Scotland, Orkney is a group of about seventy islands – the exact number depending upon the definition of when a rock becomes an island – that lies between the Atlantic Ocean and the North Sea, at a latitude of approximately 59° north (Berry 2000, 5). This location provides dramatically contrasting light and weather conditions over the course of the year, with only a few hours of darkness at the height of summer; this situation becomes reversed in the winter months – a period that also sees a noticeable increase in rainfall and storminess. These dramatic variations have an important impact on the seasonality of different tasks, particularly those undertaken out-of-doors, and as Ingold (2005b) has argued the weather is something that we perceive in, and as such it becomes a fundamental part of the dynamic landscapes that we and people in the past dwelt within.
By the standards of Scottish geology, most of Orkney is not particularly old and is dominated by the Lower Middle to Upper Devonian sandstones, the exception being exposures of the Precambrian Basement complex consisting of a pinkish-grey granite-gneiss at Graemsay, Stromness and Yesnaby (Mykura 1976, 40; Strachan 2003) and overlying the solid geology is a mixed distribution of boulder clay, sand and peat.

Figure 4.1 Location of the case study areas © Crown Copyright/database right 2012. An Ordnance Survey/EDINA supplied service.
The two study areas cover a broad geomorphological range. The coastline of Eynhallow Sound is characterised by low rock and boulder clay cliffs, generally with solid wave cut platforms on the more exposed shores, and beaches of boulders and occasionally sand being created in the bays and inlets. The majority of the coastline of the Yesnaby-Skaill study area is precipitous, west-facing sea cliffs exposed to the full force of Atlantic storms. The exceptions are three breaks in the cliff line (at Skaill, Bigging and Borwick, see Figure 4.4), which constitute the limited, but important points of contact between the marine and terrestrial environments.
Although all three of these appear to have been significant foci of settlement and activity at various times, perhaps the most important, and consistently inhabited of these is the sheltered sandy bay of Skaill, where sand movement and machair development between ca. 6100 and 5000 yrs. BP probably affected Neolithic agricultural practices before the present bay formed sometime after cal. 3325–2900BC (de la Vega-Leinert et al. 2000).

Figure 4.3 A sample of the landscapes of the Yesnaby-Skaill study area

Inland from the coasts the two study areas continue to vary in elevation and landform, although as with most of Orkney the impact of generations of agricultural cultivation is
Chapter Four: Introduction to the case studies

apparent. The landform of Eynhallow Sound broadly mirrors itself around the sea, both Rousay and Evie have comparatively narrow and flat coastal strips which are the focus of agricultural activity, these give way to heather covered hill-land which slope rapidly upwards reaching heights of up to 190m and 160m OD respectively. The interior of both upland areas is characterised by peat bog, and on Rousay a pair of ‘highland’ lochs – Peerie Water and Muckle Water – the waters of which are fairly acidic and with low levels of oxygen and nutrients, consequently supporting a comparatively narrow variety of animal and plant life (Berry 2000, 115-116). Particularly on Rousay the layering of the rock becomes clearly visible in the prominent terrace features on the hillsides, resulting from the differential weathering of the more pronounced hard and soft layers of stone which are characteristic of the Rousay flagstone formation (Mykura 1976, 77-80). In contrast the majority of the Skaill-Yesnaby area is much more gently rolling, reaching a high point of 77m OD on the hill of Gyran and although much of the area has only been ‘reclaimed from the hill’ (Lee 2007) relatively recently it is now in the main an arable landscape. The exceptions are the areas of thin soils along the coast and extending up into the higher ground which represents one of the largest areas of maritime heath in Britain (Berry 2000, 73), and the area inland of Staney Knowe which represents a typical upland of heath and peat bog.

4.1.1 The Environment in the Past

Over the past five millennia there has been comparative environmental stability in Orkney (Davidson & Jones 1985, 16) although this belies considerable and subtle geographical and chronological variations, that would have directly impacted the relationships between people and the world in which they dwelt (see summary in Table 4.1). Although there is considerable variation in palaeo-climatic models, and the evidence on which they are based has been shown to be problematic, a broad trend has been identified during the first millennium BC of
increasingly wet conditions together with a decline in temperature (Whittington & Edwards 2003, 13; Blundell & Barber 2005, 1273; Field 2008, 218).

Within these broad trends it is also possible to identify a number of century-scale climate changes that do not always fit with broader, more conventional views of climate periods (Charman 2010, 1550). Based on a series of proxies such as Irish bog oaks and peatland surface wetness, phases of increased wetness have been recognised at 3060-2870, 2770-2720, 2570-2460, 2260-2140 and 2000-1870 (all dates cal years BP) whilst in between these phases water table levels appear to fall (Charman 2010, 1547). Recent analysis of pollen data has suggested both regional and seasonal differences in temperature trends during the Holocene; so although summer temperatures decline from around 6000 cal years BP (when they were perhaps 1.8°C above present) winter temperatures continued to increase or show little change (Davies et al. 2003). Combined with other proxies a working hypotheses can be made that much of the Atlantic Iron Age can actually be regarded as a warm period, with winters in Northern Europe being a similar temperature as the present, summers being perhaps 1°C warmer, and average temperatures only being to decline towards the end of the first millennium BC (Davies et al. 2003, 1706-1710; Charman 2010, 1547-1549). Although the sequence of later Holocene vegetation change, i.e. woodland decline followed by agricultural activity, mainly pastoral, and the spread of heathland is broadly consistent, the timing of these changes is asynchronous across the archipelago (Farrell 2009, 367).

After the end of the last period of glaciation (the Loch Lomond Stadial c.9000-8300BC) the decolonisation of Scotland by trees appears to have taken several thousand years (Tipping 1994, 9), but during the fourth millennium BC, pollen evidence and sediment deposition from sites across Scotland suggests a decline in woodland, interpreted as tree clearance for agriculture (Ballantyne & Dawson 2003, 42-43; Davidson & Carter 2003, 58). The general
assumption is that this woodland decline occurred in Orkney around 3500 cal. BC but at several sites woodland loss occurred in multiple stages and areas of woodland persisted in the landscape into the Bronze Age (Farrell 2009, 367). Likewise a generally accepted date for heathland development of around 1800 BC now seems something of an oversimplification, with heath becoming established in exposed areas during the late Mesolithic, whilst not occurring in other locations until the Iron Age (Farrell 2009, 367-369).

During the Bronze Age an open, largely treeless landscape formed, with small relict stands of birch-hazel scrub, and the available palaeo-ecological evidence suggests that intensive pastoral activity was widespread, even extending into some marginal upland areas while elsewhere arable cultivation intensified (Farrell 2009, 391). There is some evidence for a slight climatic deterioration during the mid to late Bronze Age, particularly in more marginal areas of Orkney (Keatinge & Dickson 1979; Farrell 2009, 377) and this may coincide with the widespread climatic deterioration that appears to have occurred across north-west Europe around 850 BC (e.g. Blundell & Barber 2005). This decline does not appear to have been severe enough to cause widespread agricultural abandonment in Orkney, and although exploitation of some more marginal areas may no longer have been viable (Farrell 2009, 377) there is evidence that people were adapting their farming practices in order to continue to cultivate some of these marginal environments (Simpson et al. 1998; Guttmann et al. 2006).
<table>
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<th>Period</th>
<th>West Mainland fertile lowlands</th>
<th>West Mainland marginal uplands</th>
<th>Hoy</th>
<th>Rousay</th>
<th>South Ronaldsay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Age</td>
<td>Heathland development due to climatic &amp; anthropogenic factors. Increased grazing &amp; arable indicators.</td>
<td>Largely open, treeless landscape. Heathland development due to climatic &amp; anthropogenic factors.</td>
<td>Increased charcoal &amp; Calluna percentages; possible heathland management c. 250 cal. AD.</td>
<td>Largely open, treeless landscape with some small relict woodland patches.</td>
<td>Largely open, treeless landscape with some small relict woodland patches. Fairly intensive mixed agriculture.</td>
</tr>
<tr>
<td>Bronze Age</td>
<td>Largely open, treeless landscape with some small relict woodland patches. Low intensity mixed agriculture.</td>
<td>Largely open, treeless landscape with some small relict woodland patches. Peat formation due to climatic &amp; anthropogenic factors. Fairly intensive pastoral activity.</td>
<td></td>
<td></td>
<td>Largely open, treeless landscape with some small relict woodland patches. Fairly intensive mixed agriculture.</td>
</tr>
<tr>
<td>Mesolithic</td>
<td>Heathland vegetation replaced by tall-herb grassland c. 9550 cal. BC. Tall-herb grassland replaced by birch-hazel scrub c. 6950 cal. BC. Brief woodland disturbance attributed to human activity.</td>
<td>Birch-hazel scrub woodland present. Brief woodland disturbance attributed to human activity. Heathland development occurred from c. 5850 cal. BC. Woodland decline and further heath development c. 4850 cal. BC.</td>
<td>Birch-hazel scrub woodland present.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1 Summary of the major palaeo-ecological changes in Orkney during prehistory (after Farrell 2009, table 3.2)
Although the evidence is limited, with much coming from marginal peatland, during the Iron Age there appears to be a continuity of arable activity, with perhaps a slight decline in pastoral farming, and this intensive agrarian activity appears to lead to soil degradation (Farrell 2009, 130-131). The Iron Age in Orkney appears to be a period of widespread heathland development, including evidence from Scapa Bay and the loch of Knitchen on Rousay (Bunting 1996; de la Vega-Leinert et al. 2007). Agriculture does appear to have continued at some of these marginal and semi-marginal locations, albeit in some cases, such as Whaness Burn, Hoy, less intensively than in earlier periods and some of this developing heathland appears to have been managed by deliberate burning (Farrell 2009, 377-378).

### 4.1.2 Sea-level Change and Coastal Erosion

The extensive coastline of Orkney, more than 500 miles in length (Berry 2000, 44) is the dominate feature of the archipelago and the maritime environment has played a significant role in the life of the islands and its inhabitants. Despite its significance Holocene sea level change in Orkney is only beginning to be understood, with much of the information being inferred from evidence drawn from Mainland Scotland (Smith et al. 1996, 16). It is becoming clear that both eustatic sea-level rise and isostatic rebound have contributed to these fluctuations and ongoing work seems to suggest that the seas around Orkney reached present levels approximately 4000 years ago (Wickham-Jones et al. 2010, 3-4), although there is considerable local variation in the impact that these changing sea-levels had. Sea-level rise at Echna loch is radiocarbon dated to 2570-2340 cal. BC whilst the transition from a freshwater to marine environment did not occur in parts of the Loch of Stenness until 1440-1250 cal BC, probably as a result of the sheltered nature of the latter (Ibid.). At the Bay of Skail, the environmental evidence suggests that before the formation of the sandy bay seen today a freshwater marsh developed, probably in response to rising water tables, between cal. 5590-5305 BC (de la Vega-Leinert et al. 2000, 525). The presence of submerged areas of peat in
several bays within the archipelago provides further evidence for the gradual rise in sea-levels (Mykura 1976, 114-116), most notably that at Otterswick, Sanday, which contained wood, identified as *Salix* and radiocarbon dated to 6500 BP, that sea level has risen by around three metres since the demise of the woodland (Hall & Brown 2010a).

Although this evidence suggest sea-levels continued to rise and fluctuate during later prehistory and the medieval period this would appear to only be in the order of 1-3m (Davidson & Jones 1985, 28-29; Hall & Brown 2010b) suggesting that wave erosion, rather than sea-level change would have played a more significant role in the modification of the Orcadian coastline during the Iron Age. Coastal erosion rarely occurs at a consistent rate, being strongly affected by both the geology of the coast and also both individual storm events, and longer term attrition. A convincing record of storminess in the North Atlantic has been drawn from the GISP2 ice-core (Sommerville et al. 2007, 634) and although only the last 1400 years has been analysed at high resolution there appears to be a general trend of declining storminess during the first half of the first millennium AD (Dugmore et al. 2007, Fig. 4) but this analysis does not extend into the first millennium BC. Although the complex relationship between aeolian events, storminess and the GISP2 record is not fully understood, more locally sand layers at two sites on Sanday, Orkney, which have been dated to the late Bronze Age/early Iron Age appear to indicate several periods of increased aeolian activity (Sommerville et al. 2007). Using OSL dates a number of sand movements have also similarly been identified in the Western Isles, two of these phases at 3800-3300 and 1700-1300 years ago would broadly appear to bookend the Late Bronze and Iron Age although the relationship between dune drift, soils formation and land use in coastal dunes has been shown to be complex and thus the absence of sand sequences does not inevitably imply periods of decreased storminess (Gilbertson et al. 1999, 465). Therefore whilst we can be certain that coastal erosion has affected the shape of the coast and the distances of settlements from the sea, any estimates
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of the rates of change and locations of late prehistoric coastlines must be treated with considerable caution.

4.2 A BRIEF HISTORY OF RESEARCH

Research into the later prehistory of Orkney has traditionally taken a site rather than landscape based perspective (Lamb & Turner 1991). In part this is a result of 19th and 20th century agricultural improvement, which levelled many of the more subtle field remains, but Orkney was also a strong focus of antiquarian interest during the same period. The primary aim of most of these excavations appears to have been to expose the main structure, with brochs and tombs being the primary focus of interest. Although standards can be seen to improve over time, recording was generally poor, particularly with regard to soft deposits and extramural and post-broch structures. This focus on the excavation of substantial settlement mounds can be seen to also relate to the comparative lack of evidence for Bronze Age activity in Orkney, which has been characterised as dominated by funerary monuments and burnt mounds (Øvrevik 1985), with the lack of richer material being seen as evidence of the Bronze Age in Orkney as a ‘dull time’ of ‘economic depression’ (Ritchie 1995, 86-95).

More recently a number of rescue driven excavations of sites at Bu (Hedges 1987a), Howe (Ballin Smith 1994) and Pierowall (Sharples 1984) have provided important examples of Iron Age settlement excavated to modern standards, albeit with the constraints inherent in the time and resource limited world of rescue archaeology. Of particular significance is the research, based primarily on Sanday and led by staff from the University of Bradford during the 1980s, which although focused on excavations at Pool (Hunter 1990; 2007) and Tofts Ness (Dockrill & Gater 1992; Dockrill 2007) undertook detailed analysis of the economic and environmental evidence from the sites to consider the Iron Age settlements in relation to their contemporary landscapes. Both of these excavations also highlighted the multi-period nature
of landscapes, and indeed many prehistoric settlements in Orkney, with Neolithic elements at both sites and apparent continuity of inhabitation at Tofts Ness during the Late Bronze Age and Early Iron Age. This blurring between the two periods is increasing evident, with the expanded chronological range of burnt mounds in Orkney extending into the Iron Age (Anthony 2003) and Late Bronze Age dates being recorded at souterrains such as Ness Breck (Carruthers & Lee forthcoming). The Late Bronze-Early Iron Age phases at Tofts Ness cover the first half of the first millennium BC, providing detail about both the Iron Age and Bronze Age landscapes of Orkney, and alongside the excavation of Bronze Age settlements at Skaill, Deerness (Buteux 1997, 24-37) and the Links of Notland (Moore & Wilson 2011) present clearer evidence of Bronze Age domestic inhabitation. Taken together with the large number of barrow cemeteries and burnt mounds this suggests a well-populated landscape, and as already discussed above a re-assessment of environmental evidence also challenges the idea of a Bronze Age ‘decline’ shaped by environmental deterioration (Farrell 2009).

Tofts Ness also provides an example of the comparatively early application of geophysical survey techniques to later prehistoric sites in Orkney (Dockrill & Gater 1992). Although limited in scale these surveys demonstrated the potential of the techniques, which have become increasingly commonly utilised since the establishment of a geophysical survey unit at Orkney College UHI. This reflects a small but growing focus on the application of non-invasive research approaches with a number of new sites also being recognised as a result of aerial survey in Orkney, despite the archipelago having been previously identified as unsuitable (Cowley 2010; 2011, 51-53). GIS modelling has also been employed to consider the connections between sites and their setting in the landscape (Rahn 2005; 2007) although as a primarily methodological assessment the conclusions that can be drawn about the Iron Age world are comparatively limited.
Most recently, and as part of a general movement in Iron Age studies (ScARF. 2012j), there has been the growing understanding that despite the apparently domestic nature of much of the archaeological material, there is strong evidence for the rituals and beliefs of the period. Much of this has come through the recognition of acts of structured deposition and ritualised practices at settlement sites, such as the human remains interred in the ‘drain’ below the entrance passage to the phase S roundhouse at Howe (Armit & Ginn 2007, 118) which had previously been interpreted in a more prosaic fashion (Ballin Smith 1994, 38–39). Non-domestic sites have also been recognised, with important research excavations having been undertaken at Mine Howe (Card & Downes 2003; Card et al. 2005b) and the Knowe of Skea, Westray (Moore & Wilson 2005; 2006; 2007). Both sites are non-domestic in nature, with evidence for metalworking and also burial, with work at the latter site revealing more than 200 burials (ScARF. 2012j) and have been associated with liminal positions in the landscape - the Knowe of Skea situated on an islet or promontory, and Mine Howe apparently surrounded by marshy, waterlogged ground. It is interesting to note the ease with which the landscape setting of both of these non-domestic sites has been identified as significant; a clear contrast to the lack of consideration given to the immediate environs of settlement sites which are generally interpreted in economic terms, such as the access to certain resources. Mine Howe is also significant because of the subterranean element to the site; an emerging trend in the Iron Age, which may be related to an ‘underworld’ component of the Iron Age cosmological landscape (ScARF. 2012j), and which is also being considered in the examination of the souterrains and wells of the period in both domestic and non-domestic settings (Carruthers forthcoming).

Within both study areas there are locales and sites that have formed important foci of study over the last one hundred and fifty years, but in contrast there are also areas which have received little or no archaeological attention. A combination of the records held at the Orkney
Sites & Monuments Record (SMR) held in Kirkwall and the National Monuments Record maintained by the RCAHMS in Edinburgh, show that there are respectively forty-six and forty-five recorded sites in the Yesnaby-Skaill and Eynhallow Sound study areas (see Table 4.2 and Figure 4.4 & Figure 4.5 for more detail), ranging from well-known prehistoric sites such as Skara Brae and Midhowe, through to post-medieval farmsteads noted on the first edition Ordnance Survey maps and the remnants of the role that Orkney played in the conflicts of the twentieth century.

<table>
<thead>
<tr>
<th>Area</th>
<th>Total records</th>
<th>Scheduled sites</th>
<th>Site density (per sq. km.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yesnaby – Skaill</td>
<td>46</td>
<td>14(^1)</td>
<td>6.16</td>
</tr>
<tr>
<td>Evie</td>
<td>9</td>
<td>4</td>
<td>4.27</td>
</tr>
<tr>
<td>Eynhallow</td>
<td>12</td>
<td>2</td>
<td>16.67</td>
</tr>
<tr>
<td>Rousay</td>
<td>24</td>
<td>11</td>
<td>11.88</td>
</tr>
</tbody>
</table>

Table 4.2 Comparative numbers of sites within the study areas recorded in the SMR and NMRS (This does not include records for maritime losses or ‘Events’ from the NMRS)

A comparison of site densities presents a wide ranging picture, but one that probably says more about the level of antiquarian and archaeological interest in the respective areas than it does about settlement patterns in the past. A further ten records, from the NMRS, of maritime losses in the seas off the study areas, reiterates the importance of the maritime environment in the lives of the people who dwelt in these areas.

\(^1\) Including the nine Prehistoric & Viking sites/records within the Skara Brae scheduled area
Figure 4.4 Site distribution within the Yesnaby-Skaill study area © Crown Copyright/database right 2012. An Ordnance Survey/EDINA supplied service.
Figure 4.5 Site distribution within the Eynhallow Sound study area Top: Rousay, Bottom: Evie

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The Yesnaby area has been subject to comparatively little archaeological attention, with the main investigator being the antiquarian William G.T. Watt, Laird of Skaill and Breckness, whose father (also William) had originally noted the uncovering of Skara Brae (Petrie 1867). During the later 19th century he recorded a handful of apparently prehistoric cists, such as those on Gyran hill (HY21NW9; HY21NW10) which contained steatite urns (Watt 1885), and was also responsible for the incomplete excavations at the Broch of Borwick (Watt 1882) which will be discussed in more detail below. The Bay of Skaill has seen a considerable focus of fieldwork and research since the exposure of Skara Brae during a storm in 1850, most notably by V Gordon Childe in the earlier twentieth century (Card 2005, 42), and the presence of Skail House, St Peter’s Kirk and the hoard of Viking silver from the Castle of Snusgar have attracted both archaeological investigations and also suggest that the bay has long been an important locale, with some of the best, and earliest developed land in the parish (Gibbon 2006, 802). More recently this focus has broadened with fieldwalking (Richards 1985) and geophysical survey (OCGU 2008; ORCA 2011) considering the wider landscape, something that can be linked both to changing approaches within the wider archaeological discipline and also to the impact of The Heart of Neolithic Orkney World Heritage Site Research Agenda (Downes et al. 2005).

The history of investigations in the Eynhallow Sound study area mirrors, in some respects that at Yesnaby-Skaill, with Rousay being particularly rich in excavated sites, whilst Evie is generally rather under-represented. This is the legacy of Walter Grant’s programme of investigations, including the excavation with V Gordon Childe of the Neolithic settlement at Rinyo (Childe & Grant 1939; 1947) and collaborative efforts with J G Callender which saw the broch at Midhowe, ten chambered tombs and numerous other cists and mounds excavated (Reynolds & Ritchie 1985). Although techniques of excavation were still quite basic, with the overriding
objective at many sites being the provision of a monument for display, Callender and Grant did record the position of artefacts and human bone (Card 2005, 43) and the majority of the excavations were published. In contrast, within the Evie study area the Broch of Burgar is apparently the only site to have been investigated during the 19th century (Peterkin 1831). Mention is also made of several barrows in the area which were opened, the urns which they contained were ‘broken by the carelessness of the workmen’ (Peterkin 1831, 45) and there appears to be no subsequent record of these barrows, although may relate to the possible cist located at the Taing of Burgar (HY32 NE45). Also of note and relevance, although lying outside of the study area is the Broch of Gurness, one of the best preserved broch in Orkney which was ‘rediscovered’ in 1929 and excavated over a decade of summer seasons (Hedges 1987b, 1) although again not with the scientific rigour of modern investigations. Much of the interest in the island of Eynhallow has centred on the ruined structure of the church or monastery uncovered during the clearing of the island in 1851 which has been the focus of much debate amongst historians and archaeologists. With the exception of some poorly recorded investigations at Monkerness by Mooney in the early twentieth century (Mooney 1923) there has been little archaeological fieldwork undertaken on the island prior to the 2007 survey (Moore & Thomas 2008) which will be more fully discussed in Chapter 5.

4.2.1 Brochs within the study areas

There are eight apparent brochs (Borwick, Loupandessness, Burgar, Grugar, North Howe, Midhowe, South Howe and the Knowe of Swandro) located in the two study areas, although the nature and status of some of these sites is more clearly understood than others. Also of relevance is the roundhouse and associated enclosures, apparently of a Bronze Age date, located on the Peerie Hill, Yesnaby (Orkney SMR: OR 2898). Several authors during the 19th and earlier 20th centuries suggested that there was a second broch at Yesnaby (Fraser 1924) but this is a result of confusion over placenames, with the Brough of Bigging being a promontory
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fort rather than a roundhouse settlement. These sites represent a typical range of the preservation conditions found in Orkney, with both Borwick and Midhowe having been fairly extensively excavated and published during the early days of archaeological investigations in Orkney (Watt 1882; Callander & Grant 1934a). The Knowe of Swandro and the Broch of Burgar also show evidence of antiquarian depredations, the former possibly by W.G. Grant (RCAHMS: HY32NE4) and the latter leading to the uncovering of a now lost Pictish treasure (Peterkin 1831; Graham-Campbell 1985). The probable broch at Skaill (Loupandessness), survives as a low grassy mound, only being ‘re-discovered’ during the programme of gradiometer survey undertaken around the World Heritage Sites (OCGU 2008) although the apparent location of a ‘rather crude Celtic cross-mould’ from the site (Stewart & Dawkins 1914) together with the presence nearby, of a cist burial dated to the mid sixth to late seventh century AD (James 1999, 773-774) may suggest that the site continued to be occupied into the late Iron Age. Inevitably some of these sites have also been affected by later re-use and the impact of coastal erosion; this is most evident at South Howe, which is overlain by the post-medieval/early modern farm of Brough, as well as being heavily damaged by coastal erosion.

The Broch of Borwick was investigated by W.G. Watt in 1881, during the heyday of antiquarian investigations in Orkney (Card 2005, 41) and although the excavation was published (1882) the standards of recording were limited and no plan of the features excavated was included. The broch sits to the north of an inlet at the top of precipitous 20m high cliffs, a position which may have been intended to deliberately visually isolate the builders from neighbouring settlements, whilst still retaining the ability to watch their surroundings from a central point (Rahn 2007, 203). Such a position has also inevitably led to the site being damaged by marine erosion, and whilst this has revealed midden deposits containing middle Iron Age pottery (Lynn & Bell 1983; 1987) it has also undoubtedly affected the landscape setting of the broch, and
although based on a problematic constant rate of erosion, an estimated 175m of land may have been lost in the past two millennia (Rahn 2007, 63).

The Broch of Burgar was first investigated by Peterkin in 1825 and then by Gordon 15-20 years later (Hedges 1987c, 59) when a skeleton and a silver hoard, almost certainly of Pictish or Norse origin were uncovered (Graham-Campbell 1985, 250). Unfortunately these excavations were typically unscientific and clearly more concerned with the recovery of artefactual remains. The only record is that provided by Thomas' (1852) brief description and rather abstract plan, which gives little detail beyond recording the overall dimensions, as well as noting the structure was formed from two concentric walls each approximately 1.5m thick and separated by circa. 2.1m, a distance that seems rather larger than the typical intra-mural passages found in other brochs.

The central contribution to the archaeology of Rousay by W.G. Grant has already been discussed above, and it was Grant who led and financed the excavations at Midhowe broch between 1930 and 1933, although the work itself was done almost single handedly by James K Yorston, after which the site was handed over to the state, conserved and taken into Guardianship (Hedges 1987c, 110). Eighty years later, a collaborative project ‘Orkney: Gateway to the Atlantic’ undertaken by archaeologists, including myself, from the University of Bradford, City University of New York and the University of the Highlands & Islands, is focusing research on the ways in which people and society reacted and adapted to climatic and environmental change over time (Dockrill & Bond 2010, 7) through a new programme of ongoing investigations in Rousay, in particular excavating sections of both South Howe and the Knowe of Swandro, as well as undertaking research in the wider landscape. Work so far has confirmed the presence at South Howe, of a broch-like structure together with an apparently contemporary extramural settlement to the west, with samples taken for AMS radiocarbon
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dating confirming the Iron Age date (Dockrill & Bond 2010). Two seasons of excavation at the
Knowe of Swandro have also confirmed the presence of broadly contemporary settlement,
although this now seems to be of a non-broch form which reuses the site of a Neolithic
chambered tomb. Both have been heavily eroded by the sea, with test pitting suggesting that
the archaeological deposits at the Knowe of Swandro extend up to 30m to the south of the
current excavations (Dockrill & Bond 2013).

4.3 METHODOLOGY

At the core of the research for this thesis, like so many archaeological investigations, is a
tension between empirical, scientific practice and theoretical, subjective interpretation (see
Chapter 3). Although the following sections are divided into apparently separate approaches,
there is a clear need and desire to develop more integrated and reflexive approaches which
broach the dichotomy between theory and practice. Following Baines & Brophy (2006) rather
than arguing for a compromise, a ‘half-way house’ between objectivity and subjectivity, an
alternative way that recognises the emergent and relational character of archaeology will be
followed. Such an approach views material formations as composed of networks of relations,
as much as of distinct objects (Baines & Brophy 2006, 74) and the same relational
understanding can also be applied to the techniques by which data are created – this will be
discussed in greater detail below.

4.3.1 WALKOVER SURVEY

Landscape survey is the essential tool of landscape archaeology (Halliday & Stevenson 1991,
134) and in Scotland builds on a legacy developed from the work of the Ordnance Survey and
the Royal Commission on the Ancient and Historical Monuments of Scotland since the mid-19th
century (Proudfoot 1982; Davidson 1986). More recently walkover approaches have been
employed with great success in a range of upland and island locations for example North-east
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Perth, the Bhaltos peninsula, Lewis and Fair Isle (RCAHMS 1990; Armit 1994; Hunter 1996). Despite the significant impact of modern agricultural practices upon the visibility of many field monuments, walkover survey has been widely employed in Orkney over the last thirty years, mainly on the small islands such as Muckle Skerry (Hunter & Dockrill 1982) and Wyre (Thomas 2006). The potential value of walkover survey in Orkney is well illustrated by the striking difference between the dozen sites on Eynhallow that are recorded in the Orkney SMR and the NMRS (see Table 4.2), and the sixty-six sites noted during the 2007 survey (Moore & Thomas 2008). The range of types of site recorded on Eynhallow in 2007 was much greater than might have been of interest to Mooney (1923) or the Royal Commission during their visits in the early twentieth century, therefore impacting the number of sites recorded, but the systematic survey led to the identification of unrecorded sites such as two prehistoric kerbed cairns, and a series of dykes that may well have prehistoric origins.

In total approximately 12 sq. km of walkover survey were undertaken in the study areas, covering almost every type of ground cover from sandy beaches, through the typical Orcadian agricultural landscapes of pasture and arable fields, to heather and peat bogs which nearly claimed boots and ranging rods on several occasions! This survey was undertaken by the author, with assistance from various friends, colleagues and students from Orkney College, who are listed in the acknowledgements at the start of the thesis. All areas were systematically visually surveyed whilst walking a series of parallel traverses 50m apart. Generally these traverses were aligned according to field boundaries or other immediate physical features. Where such features were notably absent, for example the afore mentioned peat bogs, traverses were aligned using compass bearings which were regularly checked during the course of walking each traverse. All sites were recorded using a standardised pro-forma (Figure 4.6), located using a hand-held, leisure grade GPS and photographed using a digital SLR camera. This type of survey provides a rapid and cost-
effective method of obtaining a basic record of the presence and nature of the archaeological resource visible within the study areas (Scotland's Rural Past 2011).

![Table: Site recording pro-forma](image)

### Figure 4.6 Site recording pro-forma

#### 4.3.2 Detailed Mapping

One of the main criticisms of much walkover survey as discussed above is that the data that results from these surveys is presented in terms of spots on maps, with little attempt to contextualise them (Halliday & Stevenson 1991, 134-135). These ‘objective’ attempts to record archaeological field remains are inevitably conditioned by the restrictions of modern...
equipment as well as modern landscape features (McOmish et al. 2002, 160) and surveyors frequently do not look at the full landscape, instead focusing on traditional site-based methodologies (Foster & Krivanek 2000, 78).

A monument type which is particularly poorly represented using a single dot are field boundaries. These can date from the earliest phases of agriculture through until the present day, and can range in form, function and construction nearly as widely. Although traditionally Orkney has been seen to lack extensive fieldsystem (Lamb & Turner 1991, 168-169) there is increasing evidence of pockets of preservation of prehistoric fieldsystems in more marginal areas of Orkney such as Linkataing on Eday, (Sharman & Robertson 2007) and Spurdygrove, Mainland (Hedges 1978), that present a opportunity to dramatically add to the understanding of prehistoric landscapes in Orkney. Detailed mapping of all boundary features (excluding modern field boundaries) was undertaken regardless of date, including many which were apparently of a post-medieval or early modern origin, or are visible on 1st edition Ordnance Survey mapping. Not only was it felt that to not record these later monuments might potentially bias the data, but also under-value important historical boundary features. In addition there are examples of the continued persistence and re-use of prehistoric features as later boundaries, most notably the Dyke of Sean (RCAHMS - HY21 SE68) – a linear earthwork of apparently Neolithic origin, which continues to represent the modern parish boundary between Stenness and Sandwick.

The course of each boundary was plotted by taking regular 3D coordinates using GPS, generally a Trimble survey grade system giving sub-centimetre accuracy, along the feature. When this equipment was not available, a leisure-grade GPS was utilised. These hand-held GPS generally only provide an accuracy of ±7m, so the system outlined by the RCAHMS (Scotland’s Rural Past 2011, 22-23) was employed to adjust the readings to more accurately relate the GPS points to
the Ordnance Survey mapping. In addition, given the value demonstrated elsewhere (e.g. Johnston 2000; 2005a) in exploring the different practices and phases within superficially homogenous boundaries, detailed sketch plans and notes were taken for each boundary, detailing the construction methods and materials, potential reworking or re-use, and any alignments or relationships noted with other natural and/or cultural features in the vicinity.

4.3.3 **Geophysical Survey**

Walkover survey provides a comprehensive view of the extant archaeological remains, but for obvious reasons the buried resource is more difficult to assess and quantify, and as discussed above can often fail to contextualise the sites that it records. Questions often remain about the nature and extent of the site, and of the evidence of relationships that might exist beneath the ploughsoil. Whilst addressing the need to assess the buried archaeological resource, a key research aim was to explore the context of the key late prehistoric sites identified through the initial walkover survey, this is particularly worthwhile given the nature of many such sites, which have often be characterised as islands of archaeology in a sea of agricultural improvement (Lamb & Turner 1991, 167-168). Therefore comparatively large scale gradiometer survey was focused upon these sites, generally covering several hectares and extending well beyond the limits of the extant archaeological remains. The extensive gradiometer surveys undertaken in the inner buffer zones of the World Heritage Sites, which have identified both complex multi-period buried landscapes, and also illuminated some of the relationships between contemporary monuments (Card et al. 2007), has clearly demonstrated the value of such an approach, although the nature of this doctoral research precluded the undertaking of quite such substantial areas.

Geophysical survey has previously been dismissed as an unsuitable technique in much of Scotland due to the geology, and only an average to poor response to gradiometer survey is
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expected from the Old Red Sandstones (David 1995, table 3) that comprise the bulk of Orkney’s solid geology. However, a considerable number of gradiometer surveys, such as the extensive survey around the World Heritage Area (Card et al. 2007) have shown the efficacy of the technique in Orkney. The exception to this is the presence of several hundred ‘Trap Dykes’ of igneous origins which cut the Devonian sediments, generally in a NE-SW direction (Mykura 1976, 96; Berry 2000, 37) these are highly magnetised and when they occur in survey areas, they can saturate and obscure readings in an area far exceeding their physical dimensions.

Gradiometer survey was undertaken on all sites using Bartington Grad-601 dual fluxgate gradiometers. This comprises two fluxgate sensors mounted 1m apart on a vertical axis. Each sensor measures the earth’s magnetic field, in nanoTesla (nT), and the instrument records the difference between the observed readings for each sensor. By doing so the instrument is capable of recording subtle changes or anomalies in the earth’s magnetic field caused by material in the top metre or so of the earth’s surface (Gaffney et al. 2002, 12), whilst variations due to large-scale geological variations and diurnal fluctuations are filtered out. Such instruments are particularly good at detecting burnt or fired features such as kilns and hearths, and routinely respond well to negative features, such as ditches and pits, cut into the subsoil (Gaffney & Gater 2003, 37), as well as accumulations of midden material and occupational deposits. Across each survey area a 20m survey grid was established and tied in, using a Trimble Total Station or Differential GPS. This variation was entirely pragmatic, reflecting the availability of equipment, and both systems provide a level of accuracy well in excess of that required for archaeological geophysics. Grids were walked on a zig-zag pattern, with data collected at 1x0.25m intervals. Gradiometer data was processed using Geoscan Geoplot 3.0, where ever possible a minimal amount of processing was undertaken to avoid the creation of digital artefacts. Generally data was ‘zero-mean traversed’ and ‘de-staggered’ to remove discontinuities between adjacent grids and striping effects within grids caused by ‘zig-zag’
A collection of data. The data were then interpolated twice in the x direction to produce a 'square' data-set.

### 4.3.4 Aerial Photography

Initially it had been intended to make as little use of aerial photography as possible, as it was felt that the detached ‘bird’s eye’ view was at odds with the embodied and experiential perspective that sits at the core of the research. The hegemony of vision in the modern Western world has been comprehensively discussed, with aerial photography often being cited as an example of its prevalence (e.g. Thomas 1993; Frieman & Gillings 2007; Wilkinson 2008; Wickstead 2009). The perception of the landscape from such an elevated position is undoubtedly different, and there is also certainly the potential for the ‘disembodied’ gaze to lend greater credence or significance to interpretations drawn from such images. But aerial photography is far from the objective exercise that might be imagined by many archaeologists, with variability in condition and between sorties, and with skills and subjective understanding developed over many years representing a much more human experience (Brophy 2005; Cowley & Gilmour 2005). Regardless of the critiques that many writers have produced regarding aerial reconnaissance, the technique remains an important and powerful means of investigation, interpretation and presentation at a landscape scale (Wilson 2000; Johnson 2007, 84; Cowley 2011) and much like other areas of field survey its inherent subjectivity is to be embraced rather than denied (Brophy 2005, 35).

The use of aerial photography in this research was however challenged in rather revelatory fashion after having been invited to join Dave Cowley from the RCAHMS on a sortie over Orkney in May 2009. During the sortie we spent a considerable amount of time over both the Yesnaby-Skaill and Eynhallow Sound study areas and I was able to take a considerable number of photographs of the sites and wider landscapes of both areas. Whilst the aerial perspective is
undoubtedly an almost solely visual experience, it is also most definitely still an embodied human experience of the landscape. From such an elevated position it is possible not only to identify archaeological features, but also in allowing an appreciation of the land surface that is not possible for a ground based observer (Wilson 2000, 23) the relationships between sites, and between the natural and cultural elements of the landscape can be reconsidered from a very different perspective. The speed with which it is possible to explore a landscape is also not to be underestimated, making it viable to move swiftly between the different sites within the study areas. This is of course a salient reminder of the potential for misunderstanding how the landscape might work at a human scale (Edmonds 1999, 162), but is only a problem if the aerial perspective is not combined with either other ground-based techniques and/or a strong theoretical position. As such the research detailed here provides a perfect opportunity to combine aerial and ground-based perspectives on the landscape, and the aerial photographs taken on the sortie also provide an excellent means of illustrating and presenting elements of the archaeological landscapes of the case-study areas that are more difficult to appreciate from a photograph taken from the ground.

4.3.5 PHENOMENOLOGICAL RECORDING

Although not without issues, and critics (see discussion in Chapter 3) phenomenology provides a key tool in approaching the landscape in new and alternative ways and at the centre of this lies the archaeologist's embodied engagement with the world. Unlike early applications of a phenomenological perspective which lacked clear methodologies (e.g. Tilley 1994) there is increasingly explicit discussion of the ways in which phenomenology can be used to study and record the landscape. Central to this has been the work undertaken on projects at Leskernick (Bender et al. 1997; 2007) and the Tavoliere–Gargano region of Italy (Hamilton et al. 2006), and they provide much of the basis for the methodologies outlined below.
Pro-forma recording sheets were created for particular exercises (Figure 4.7 & Figure 4.8), these were intended to provide a more explicit and standardised means of investigation and recording. Alongside this a daybook/project diary was carried at all stages of the fieldwork – both qualitative and quantitative. This was judged to be important for a number of reasons:

1. Despite the desire for greater methodological rigour there are some forms of qualitative observations that do not sit well within a pro-forma.

2. Observations concerning the experience of the landscape during walkover or geophysical survey are equally as valid as those gained during explicitly phenomenological elements of fieldwork.
3. It was anticipated that the formalised impression created by pro-forma sheets might limit the recording of subjective data by some individuals, and the daybook was intended to be a medium by which anyone involved in the fieldwork could add their thoughts, impressions and ideas.

Whilst the daybook proved successful with regards to elements 1) and 2), it proved very difficult to encourage the majority of those who assisted with the fieldwork elements to contribute their thoughts and experiences. The blank page proved intimidating whilst ironically the pro-formas had the unintended, and unexpected, effect of encouraging a greater engagement from many. The structure and headings on the forms, prompting the recorder for the types of information required and the familiar medium of boxes which required completion, proved far more effective in gathering data. Such a reliance on this ‘safety net’ of forms provides a very tangible reminder of the ways in which archaeologists employ methodologies to mediate their engagements with material remains (Baines & Brophy 2006, 78 & 87), and the challenges facing those addressing the conflict between objective recording and subjective interpretation (e.g. Hodder 1997; Chadwick 1998).

The visual landscape surrounding each of the key sites within the study areas, was recorded using a pro-forma (Figure 4.7) developed from those used by Hamilton et al at Tavoliere–Gargano (Hamilton et al. 2006, Fig. 5), which in turn drew on similar work by a number of other archaeologists (see Cummings et al. 2002; Cummings & Whittle 2003). The series of concentric circles represent near, middle and distant horizons – these horizons are not set at particular distances, rather the elements recorded are based upon the recorder’s perception of different horizons and landscape features. These forms were completed from a single point at each site, where feasible this was at or near the entrance to the structures, although the variable level of preservation meant that this was not always possible.
As has been detailed above in Chapter 2, the consistent orientations of later prehistoric roundhouses has been interpreted as being driven by cosmological referents rather that as a result of functional considerations (Parker Pearson 1996; Bender et al. 1997, 166-170; Oswald 1997; although see Pope 2003; 2007 for critique). The inter-relationship to other structures and natural features may also have been significant, and as such some consideration of what people were seeing when they looked out of their door may be relevant. With regards to the brochs in Shetland, it has been suggested that they were generally situated in such as position as to afford a good view of the immediate surroundings, with less regard to those aspects of the landscape at a distance (Fojut 1982, 147). Does the same hold true in Orkney, or is there as Rahn suggests (Rahn 2007) greater variation in what broch dwellers could see from their dwellings? By recording the visual perception of the surrounding landscape from the entrance of each site, it was intended to assess the correspondence of the structures with the common orientation identified by Oswald and others, and also to identify any significant alignments between the structures and natural or cultural features elsewhere in the landscape.

Whilst the view from the brochs themselves is important, the nature of landscape research is fundamentally one which looks to move beyond the site. The approach taken here was a development of the 'phenomenological site catchment analysis' utilised at Tavoliere–Gargano (Hamilton et al. 2006, 54-65) as a means of combining economic approaches to landscapes with phenomenological perspectives. Site catchment analysis involved walking the landscape to study the relationship between the individual sites and the resources lying within their economic range, whist the ‘new’ kinds of information being recorded focus on visibility and subjective impressions of the nature of the journeys within a territory (Hamilton et al. 2006, 54). As well as contributing valuable information to our understanding of movement between sites and around the landscape, this approach also provides a means of exploring issues of territory. Traditional site catchment analysis adopts an economic radius based on one hours
walking – seen as standard for agricultural communities (Ibid.) however the initial experiments identified issues of gender and the use of landmarks in order to navigate within the social landscapes created with this approach, which would need to be addressed and developed in order to provide more rewarding and detailed understanding of the sites (Ibid: 60-65). A similar position can also be seen in Fitzjohn’s work (2007) which has shown that people’s perceived environments tend not to be coherent geographical entities, rather reflecting movement and visibility.

<table>
<thead>
<tr>
<th>Survey Area:</th>
<th>Journey Record No:</th>
<th>Sheet: ..........of.........</th>
</tr>
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<td>Date:</td>
<td>Weather:</td>
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<tr>
<td>Time</td>
<td>Landscape</td>
<td>Visibility</td>
</tr>
<tr>
<td>Stop</td>
<td>Start</td>
<td>e.g. Topography, vegetation etc.</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Figure 4.8 Journey recording forms**

The approach taken here was to replace the one-hour radius, walked in the cardinal directions, with one that took a more subjective and locale based approach. Thus a series of journeys were undertaken, echoing the journeys along cursus monuments undertaken by archaeologists such as Tilley (1994) and Brophy (2000). Each took pre-determined start and end points, for example North Howe and the Knowe of Rowiegar, and then the experience of walking between the two, together with the time taken and regular GPS points, was recorded using a pro-forma (Figure 4.8). The exact route was decided upon during the course of each walk,
without reference to maps, and wherever possible, disregarding modern field boundaries. This approach had the interesting effect of the walker(s) on occasion getting lost, or more accurately taking a less direct route - this was particularly prevalent when journeying in unfamiliar landscapes, and also when the origin and destination were not inter-visible, and will be discussed in more detail in Chapter 7.

4.4 RATIONALE

The preceding sections reflect the different elements of the methodology employed in the gathering of field data, as well as the structuring of the subsequent chapters. The traditional, perfect progression of fieldwork and data collection would be to work from the general survey of an extensive landscape, to the specific detailed study of an individual site, or sites. However there are potential problems and dangers in attempting to move between the general and the particular (Bradley 2003b, 157).

Some are purely pragmatic, such as access to land or the availability of equipment, and result in investigations being undertaken ‘out of sequence’. This was particularly inevitable due to the part-time nature of study, with fieldwork of different elements being undertaken over a period of approximately four years. Whilst such discontinuity was problematic at times, the opportunity for repeated engagements with the monuments and landscapes allowed seasonal and climatic conditions to be considered, an area that through necessity is often neglected, and also provided greater opportunity for more considered interpretations as well as the serendipitous recognition of important features or relationships.

More significantly a number of conceptual and theoretical issues need to be considered. Such an approach enshrines a linear process of knowledge construction, in which the aim is to establish an objective, absolute truth by moving forward with archaeological endeavours,
integrating and synthesising data, and since objectivity presupposes the notion of certainty, inevitably marginalising alternative voices and jettisoning contradictory conclusions and problems, to present a single unified interpretation (Jones 2002, 56; Harvey 2010). Such issues are particularly relevant here, given that the much of the empiricism and the problems that it presents in landscape study are hidden behind the power and appeal of the three techniques most commonly employed: the map, the air photograph and the hachured plan, which inscribe the gaze, particularly the schematic birds-eye view as an all powerful tool for understanding the landscape (Johnson 2007, 84) that in no way captures how a place was set in the land, how it was approached, or how it worked at a human scale (Edmonds 1999, 162). Nor can research that has at its core an assessment of the human experience of the world, be neatly divided into such methodological categories. Is it possible to undertake walkover survey or collect geophysical data, without also engaging with the landscapes of the study areas? The reality is of course, that from the first tentative visits to Yesnaby, the Bay of Skaill and Eynhallow Sound, data has been gathered in the form of experiences and perception which shapes the interpretations presented in the following chapters.

Third-person narrative, measured drawings, tables, lists and scaled photos are all part of the language of archaeological communication and give the impression of neutrality and objectivity untainted by human purpose (Tilley 1989, 278) and they often do not allow the expression of the tangled and messy identities and relations that are bound up in the lived experience of landscape (Edmonds 2006, 186). This language does not need to be constrained by the same syntax and grammar that produces the traditional positivist and compartmentalised archaeological reporting, instead a fuller integration of information – both visual and textual – and the application of personalised, practice-based narratives (e.g. Tilley 1989; Shanks 1992; 1997; Chadwick 1998; 2004; Bateman 2006; Bender et al. 2007) carries the
potential to refocus attention upon the material culture of the landscape as relational products of people and things (Harvey 2010, 361).

Thus in keeping with one of the aims of this thesis to embrace and explore multiple narratives without rejecting outright the practices and processes of archaeological investigation (Edmonds 2006, 186) the presentation of the different elements of survey work will blend theory and method, objective and subjective, data and interpretation. The chapter structure necessitates the different datasets be presented in a linear manner: walkover survey, geophysical survey & detailed mapping, and phenomenological recording. But rather than the walkover survey representing a background to the geophysical survey, which in turn provides a basis for intensive phenomenological investigation of discrete sites, each element of fieldwork, and therefore each chapter should be seen as both complementary and independent.
5 CHAPTER FIVE: SURVEYING THE LATER PREHISTORIC LANDSCAPE

The walkover survey and associated desk-based research that was undertaken in the two study areas, together with the survey work undertaken previously on the island of Eynhallow, covered an area of just over twelve sq. km and recorded 343 sites (see Table 5.1), some well-known and others previously unrecorded, across the full chronological depth of activity within the archipelago. This provides a valuable dataset with which to explore the distribution of prehistoric sites in relation to the different landforms of the islands, and also offers an opportunity to reflect on the impacts that more than five millennia of agriculture practice have had upon the archaeological record, and also the value of walkover survey in exploring these different landscapes.

Walkover surveys such as those detailed below are conceived as an exercise in objective data collection, but there is potential for considerable personal bias, and weather and season can also play a significant role in what is recorded (see Bradley et al. 1994). Although much of the fieldwork was undertaken with the assistance of volunteers, whose sharp eyesight clearly located additional sites, no site was recorded without discussion and approval for inclusion by the author. Thus although the results of the walkover survey presented below are an account of what was on occasion a team exercise, they remain ultimately an individual interpretation of the work.

Most significant with regard to the collection and presentation of these results is the categorisation of period. These interpretations are highly subjective and often arbitrary. By their very nature they are also based solely on a limited and non-intrusive examination in the
field. Thus, although the focus of the research discussed here is on the later prehistoric landscape it was considered valuable to record all remains regardless of the period they were considered to relate to. The one exclusion from this were structures and features within the landscape which were deemed to be actively in-use, for example inhabited dwellings, sheds and farm buildings, modern field boundaries etc. Instances in which a modern element of the landscape appears to have some bearing or relationship to earlier elements within the landscape will be discussed; these sites do not appear in the full site gazetteers included at the end of this volume (Appendices 1 & 2). Therefore, although the discussion presented in this chapter is based upon those initial field observations, there is scope for sites to be re-dated and re-interpreted in light of subsequent research.

Each of the two study areas are presented separately. Commonly the discussion of the sites is divided thematically and where appropriate (or indeed when the field remains permit) by period (e.g. Lamb 1982; RCAHMS 1990). Such a format reinforces typological divisions, which as discussed in Chapter 2, can problematize our interpretation and understanding of the relationships between sites and the landscape. Therefore discussion of the results will identify individual, sometimes overlapping, locales on the basis of practice, period, and most importantly landforms and spatial relationships. This understanding of these distributions and relationships between sites within the case study areas will also be discussed in relation to other survey work undertaken within Orkney, and where appropriate further afield.
Chapter Five: Surveying the Later Prehistoric Landscape

<table>
<thead>
<tr>
<th>Site Type</th>
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<tr>
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</tr>
<tr>
<td>Burnt Mound</td>
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<td>2</td>
</tr>
<tr>
<td>Cairn</td>
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<td>3</td>
</tr>
<tr>
<td>Cairn (Clearance)</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Cairn (Marker)</td>
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<td>4</td>
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<td>2</td>
</tr>
<tr>
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<td>2</td>
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<tr>
<td>Dyke</td>
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<tr>
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</tr>
<tr>
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<tr>
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</tr>
<tr>
<td>TOTAL</td>
<td>194</td>
<td>149</td>
</tr>
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</table>

Table 5.1 Sites recorded during the walkover survey of the two study areas

5.1 YESNABY – SKAILL STUDY AREA

The Yesnaby-Skaill survey area, as described in Chapter 4 covers a range of landforms and landuse, and unsurprisingly the results of the walkover suggest a comparative absence of sites in those areas which have been more heavily agriculturally exploited (see Figure 5.1). However
Chapter Five: Surveying the Later Prehistoric Landscape

a number of prehistoric sites were identified and will be discussed in terms of their inter-relationships and their positions within the landscape.

Figure 5.1 Overall distribution of sites in the Yesnaby-Skaill study area recorded during desk-based research and walkover survey © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.
5.1.1 THE PEERIE HILL SETTLEMENT

The lower lying hilltops such as the Peerie Hill and Billia Fiold have been heavily affected by peat skimming and wind erosion; in contrast the higher slopes have considerable peat coverage. Whilst many of the lower lying areas between the hills have been more heavily cultivated and often cleared of stone, there appears to have been comparatively little cultivation with heavy agricultural machinery, and in a number of places post-medieval enclosures and structures are clearly visible. Although the identification of complete and coherent patterns is somewhat difficult the level of preservation of prehistoric earthworks, boundaries and settlement is good, and the ridges, hilltops and upland areas on the southern side of Yesnaby appear to have formed a strong focus of activity in later prehistory.
Figure 5.3 The Peerie Hill, Yesnaby (YES008) The settlement and enclosures are visible as darker earthworks (looking northwest). The Brough of Bigging promontory fort (YES001) lies beyond on the coast.

Two roundhouses, positioned on hilltops, were identified (Figure 5.4). The structure on Billia Field (YES016), approximately 11m in diameter, is quite poorly defined as a result of considerable erosion, but may have an entrance orientated to the west. A second, better preserved, roundhouse on top of the Peerie Hill (YES008), is visible as a heather covered circular bank c. 0.30m high, with an external diameter of approximately 16m in diameter, and an apparent entrance to the south-east. Both roundhouses have a pair of small, somewhat irregular, but roughly rectilinear enclosures associated with them that form aggregated ‘fields’. The dykes which form these enclosures are generally rather low, spread earth and stone banks approximately 1.5m wide and 0.45m high with large, irregularly spaced, angular orthostats, and smaller unordered stone which would likely have formed a foundation for a turf element. The Peerie Hill dykes are better preserved, with a large sub-oval enclosure encircling the
roundhouse and ‘fields’ clearly visible to the east, and also more eroded elements apparently continuing to the west as well (YES023).

Also apparently associated with this settlement are two further groups of earthworks. A short distance to the east of the Billia Fiold settlement is an aggregated group of four sub-rectilinear enclosures (YES015) on the slope above the Burn of Clovigarth. Again the earthworks that form these enclosures are constructed from stone and turf, and are approximately 1m wide and 0.30m high, with three of the enclosures being bounded on the downslope edge by the burn which runs in a natural cutting 1-2m deep. To the north of Billia Fiold, on a steep, east facing slope overlooking the boggy area at Cruland, there are three, large, sub-rectilinear enclosures (YES017). These are constructed in a similar manner to the other dykes already discussed, although the upslope edge is also defined by a substantial external ditch approximately 1.1m wide and 0.75m deep. Within the interior of all three enclosures it is possible to trace further divisions and possible clearance cairns, despite a thick covering of heather and peat.

5.1.2 THE BURNT MOUNDS

Four burnt mounds were identified during the walkover survey (YES029, YES104, YES105, YES106). These were all located immediately adjacent to the Burn of Langadee, over a stretch of approximately 250m (Figure 5.4). Despite their close location only two had previously been recorded and scheduled (HY21 NW3; SAM 1346/5286; OR 1239), although the scheduled area does, apparently by fortunate accident, cover a third smaller mound. Such an observation highlights the potential variability in visibility of sites, and reminds us of the occasional eccentricities with which the 19th century Ordnance Surveyors approached their work (see Davidson 1986).
The four sites vary considerably in form, from amorphous mounds through to a large, kidney shaped mound, so typical of the monument type, and in size from c.4.50m in diameter and a mere 0.25m high (YES105), through to the largest (YES029) which is more than 15m across at its widest point and 1.60m in height. Erosion and animal burrowing has revealed dark, presumably carbon rich soils and quantities of reddened and fire-cracked stones in all four mounds, and their location immediately adjacent to a water course adds further weight to their identification as burnt mounds. One mound (YES106) has a low sub-rectilinear earthwork containing stonework and several orthostats, immediately adjacent, which may be indicative of an associated structural element, perhaps similar to the ‘house’ at the Liddle burnt mound (Hedges 1975). The range of sizes and forms of these four closely associated mounds, suggests
variation in both post-formation biographies (YES105 for example would appear to have been partially eroded by the movement of the burn) and also their original function, and the practices which led to their development.

A short distance upstream are two small curvilinear stone and earth dykes (YES125 & YES126) which are partially overgrown with peat and may be contemporary with the burnt mounds. Two small clearance cairns (YES026 & YES028), may also be associated with these features, although their position close to a canalised burn may suggest a more recent origin resulting from drainage work. Neither the physical or functional relationships between these possibly prehistoric field features and the burnt mounds are clear; they may also be associated with the other dykes to the south and east discussed below. Assuming their identification as prehistoric is correct they would seem to indicate the presence of an extensive settled prehistoric landscape.

5.1.3 THE UPLAND DYKES

The southern limit of the survey area is defined by an upland area whose steep, peat covered, north-facing slopes provide a very different landform to the more gentle hills and agricultural landscape of the rest of the Yesnaby-Skaill survey area, but one which shows evidence of having been more actively utilised during prehistory. The hill of Cringla Fiold, which marks the south-east corner of the study area, reaches a height of 149m OD, and situated on the summit is a large sub-circular cairn (YES010), approximately 15m in diameter and 2m in height, which given the size and location, seems likely to be a Neolithic tomb.

Perhaps the most significant features in this area are a group of sub-peat dykes, 1.30-1.70m in width, and with only the top 0.25-0.50m visible above the peat. These dykes appear to share a similar style of construction to the small enclosures on the Peerie Hill and Billia Fiold, although
the orthostatic elements are more broadly spaced, perhaps suggesting a less substantial barrier. More noticeably, and in contrast to the enclosures, these dykes do not appear to form enclosures; rather they run north-south, straight across the landscape, apparently intentionally perpendicular to the contours. The longest stretches of these (YES121 & YES124) run for 57m and 108m respectively, before they become obscured by deeper peat, and would appear to represent two elements of a much longer dyke, which also aligns with the north-western end of the Peerie Hill enclosure. A small mound, perhaps an overgrown clearance cairn (YES123) appears to be associated with this dyke on the lower slopes of the hill.

Figure 5.5 The cross-contour dykes near the Staney Knowe (©RCAHMS – DP059812)

A second dyke to the west, (YES020), runs south for approximately 26m from Staney Knowe, before becoming obscured by the peat. A further element of this dyke running north, which was not noted during the walkover, is visible on an RCAHMS aerial photograph taken in 2009 (Figure 5.5), and again suggests that the overall dyke was originally a more substantial landscape feature. A third more ephemeral sub-peat dyke, with less obvious orthostatic elements (YES012), is located on the slope at Thunder Breck running for approximately 32m
down the slope. Whilst the interpretation of this feature is more tentative, it does appear to be associated with a possible platform, cut into the slope and defined on its northern edge by a low kerb (YES013), which lies a short distance down slope. Although the accumulation of peat makes it difficult to fully recognise coherent patterns, there is enough evidence to suggest that these dykes represent an area of upland, coaxial boundaries, and survey work undertaken as part of a commercially-funded project suggests that these boundaries continue to the south (Mary Saunders, ORCA pers. comm. report unavailable due to commercial sensitivity), beyond the survey described here.

To the west of these dykes the focus of the topography changes, shifting from the north facing hillside, to somewhat more gentle slopes that face out to sea. The ridgeline of Crua Breck, which divides these two locales, forms a focus for a number of cairns (YES006, YES007, YES097 & YES109). These mounds are generally oval or sub-circular, 9.2-4.8m across, varying in height from 0.70-0.30m, and composed of overgrown jumbled stone. A further sub-oval cairn (YES019) located on a secondary ridgeline that runs west from Crua Breck, is also similar in size and composition. Although positioned on the ridgeline, and in some cases apparently situated so as to be silhouetted against the sky when viewed from a distance, the form of the cairns would seem to suggest that these represent the clearance of surface stone from the surrounding area. Given their position above the historic hill-dykes, these clearance cairns are likely to relate to prehistoric agricultural activities.

5.1.4 **THE BROCH OF BORWICK**

The Broch of Borwick (YES031) sits on the north side of an inlet, the Noust of Borwick, at the top of a precipitous 20m high cliff. As detailed in Chapter 4, the site was partially excavated in 1881 (Watt 1882), leaving the main structure fully exposed, with several elements of an extramural settlement visible immediately to the south-east, although the piecemeal
excavation and subsequent accumulation of rubble across the site, makes it impossible to identify coherent forms in this extramural area. The entrance passage is the best preserved area of the site, orientated to the south-east and capped by a massive sandstone lintel which is now covered with more than 100 years of scratched graffiti.

Within the surrounding area, there is little coherent or visible prehistoric archaeology although it is not clear whether this is a true absence or if it is a result of destruction by subsequent agricultural practices. Four possible sites were identified in the vicinity of the broch. Possible structural remains were noted at two places eroding from the bank of the burn of Borwick; one a deposit of burnt stone by a possible orthostat (YES041) and further inland a possible area of paving and fragmented stone (YES087). Further activity may be suggested by a small concentration of slag, burnt bone and flint flakes noted in a recently ploughed field (YES196), and a fourth possible site may be indicated by a group of small, apparently parallel orthostats (YES033) although particular caution must be exercised in the case of the latter as the stone is apparently eroding from the gley subsoil. Although all four of these sites do hint at activity going on beyond the limits of the broch enclosure, the interpretation and dating of these ephemeral remains almost impossible.
Figure 5.7 Site distribution around the Broch of Borwick (looking southeast) Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.

Around 400m to the north-east of the broch is a substantial stone and earth dyke (YES035) that runs inland for more than 400m from Stinkna Geo. Although visible on the 1st edition Ordnance Survey map (1881) several orthostats and cist-like structural elements visible in erosion scars suggest that this may have an earlier origin. Further inland three further stretches of dyke were recorded (YES084, YES086, YES088) which appear to have been a single coherent monument. Although the banks are very different in scale, ranging from c.0.95m in height with a sub-triangular profile (YES088) to a very ephemeral linear only 0.25m in height (YES084), this seems to be a result of agricultural erosion, and an aerial photograph taken in 2009 shows soil marks that clearly connect these three elements (Figure 5.8). When examined in more detail, YES035 appears to have at least two phases, with a shift from a comparatively...
narrow and triangular profile near the coast, to a wider somewhat flat topped bank nearer to the Borwick farmstead. This change in form coincides with the location of the western end of YES088, and it would seem to suggest that the four elements (YES035/084/086/088) represent a single boundary feature running for nearly half a mile. The size and form of the best-preserved sections is in keeping with the treb dykes found elsewhere in Orkney (Lamb 1983) which are suggested to be Bronze Age in date, with only the western end of the dyke having been reused and extended as part of a post-medieval head-dyke.

Figure 5.8 Aerial photograph of the Stinkna Geo dyke (YES035/084/086/088). The later dyke is visible as an extant earthwork running towards the farm at Borwick, whilst the apparently earlier dyke can be seen as a soil mark curving to the east (looking south)

5.1.5 Bay of Skaill

As discussed in Chapter 4, the Bay of Skaill is a particularly dynamic geomorphological environment, dominated by the bay, dunes and machair, and the loch, which continues to the south-east and provides a link to the interior of the west mainland. These features provide a low lying ‘spine’ for the area with hills sloping steadily up to the north (Northdyke), east (Sandfield) and south (Ward Hill). As already discussed the northern half of the bay has been
the focus of ongoing research by archaeologists from the University of Oxford, and was not included within the walkover survey. However the bay and surrounding hillsides clearly form a distinct locale, and therefore a number of relevant sites outwith the survey area are also included in the illustration and discussion of this landscape.

Figure 5.9 Distribution of prehistoric sites around the Bay of Skail (looking east) Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.

Most notable within the area is the world-famous Neolithic settlement of Skara Brae (YES180) which was first uncovered in the mid-19th century. Subsequent excavation, recording and geophysical survey seems to suggest that the exposed buildings represent only a small part of a much more extensive area of Neolithic activity. To the west, a butchery floor (Richards 1994) and additional structural elements and midden deposits (Ashmore 1997) have been recorded, and it is likely that these relate to the archaeological deposits which are, as a result of continuing marine erosion, visible in the coastal section (YES165) although it was impossible in the field to ascertain whether these relate to the Neolithic or Norse features recorded in the
area. Geophysical survey has further demonstrated an apparent continuation of features immediately to the south of the excavated structures at Skara Brae (OCGU 2006a), and the results of this survey will be further discussed in Chapter 6. Approximately 500m to the south-east of Skara Brae, a flint scatter (YES188), located in 1984, dominated by waste flakes, together with a single scraper and an unusual polishing-grinding stone (Richards 1985, 14), provides further evidence for Neolithic or Early Bronze Age activity. An extremely large mound, apparently located on the rockshelf on the southern side of bay, is visible in a 1772 survey of the bay (Lysaght 1972, Plate 38). Although there is no archaeological evidence with which to interpret this feature, the size might suggest a substantial structure such as a broch or chambered tomb but there is no trace of any feature, natural or cultural, in this location today.

Two sites within the bay are of particular relevance to the current study, having been convincingly attributed to the Iron Age. A large mound (YES177) located a short distance from the north-west end of the Loch of Skaill. The apparent location of a Celtic cross-mould from the mound (Stewart & Dawkins 1914) might suggest later Iron Age activity, whilst the results of the gradiometer survey in 2008 demonstrated the presence of a large, multiphase broch complex (OCGU 2008) which will be discussed in greater detail in the following chapter. On the north side of the bay is the Knowe of Verron (NMRS HY21 NW22) where a programme of research work was undertaken in September 2001. Although only limited excavation and recording of the eroding section was undertaken metalworking deposits, animal bone and Iron Age pottery were recovered, and two structures were identified (Moore & Wilson 2001). The earlier of the two was sub-rectangular or oval in plan, with the form being in keeping with other Iron Age buildings found on and around broch sites (Martin Carruthers pers comm.). It should be noted that no direct evidence of the mound containing a broch was recorded, and that the overall size of the mound itself (c. 20 x 22m) is somewhat smaller than might be expected if it contains a broch and associated extramural settlement. This site may then
represent evidence of non-broch settlement within the bay, although given the location the impact of coastal erosion may have significantly impacted the size and preservation of the site.

This settlement activity is located on the flanks of the bay, whilst the centre of the area is dominated by the sandy machair and eroding dunes. Since 2003 this area has been the focus of the Birsay-Skaill landscape project led by the University of Oxford exploring Viking settlement in the bay (Griffiths 2006). Only a small area of machair was within the study area, but the walkover survey did not note any further prehistoric sites, although given the rapidly shifting nature of these sands this is perhaps not surprising. Indeed a number of watching briefs related to the construction of the Skara Brae visitor centre have demonstrated the presence of apparently historic industrial and agricultural archaeological features below more than a metre of sterile windblown sand (James 1997). The RCAHMS records the position of a possible mound (YES185) a short distance from Skaill House and to the north there is further evidence of the dunes having formed a focus for prehistoric funerary practices. At Millhouse in the centre of the bay are a group of barrows, apparently arranged in an east-west linear (HY21 NW15). Two of these were excavated in 1772 by the naturalists Joseph Banks and Rev. George
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Low and appeared to contain short cist burials likely of an Early Bronze Age date (Lysaght 1972). Further inland a large rock-cut chamber and cist, containing both inhumations and cremations, was excavated at Sand Fiold. Radiocarbon dates and the form of this monument suggest it was initially constructed during the late Neolithic period, but was then accessed again at least twice with further inhumations and cremations being added, with the final deposits dating to the beginning of the first millennium BC, some 1800 years later (Dalland 1999). Another group of inhumations were uncovered below midden deposits, at a depth of approximately 3m during roadworks in the 1930s in sand dunes near the shore, one of these burials was crouched but all were unaccompanied by grave goods thus providing little suggestion of a date (Morris et al. 1985).

Superficially then there would appear to be a distinction between the locations of settlement and funerary activity in the bay of Skaill. Given the dynamic nature of sand movement and coastal erosion a note of caution should be exercised. Gradiometer survey undertaken as part of the Birsay-Skaill project identified a number of discrete clusters of magnetic responses which might be indicative of structures within this area of machair (OCGU 2006b; 2009). Whilst some of these anomalies are somewhat tentatively identified and provide little evidence with which to suggest a date or function (OCGU 2009), excavations targeting other clearer responses has revealed a series of Viking/Norse sites, including a large longhouse (Griffiths & Harrison 2011) which further illustrates the potential for substantial archaeological features to be obscured by the sand. However those prehistoric sites which have been identified do appear to support the distinction between funerary and domestic activity, with the settlement sites from all periods of prehistory being focused upon the flanks of the bay, in somewhat liminal positions, on the margins between the hill and the machair, and between land and water.
5.1.6 *GYRAN AND WARD HILL*

Whilst as discussed above, there is small group of funerary monuments in the machair at Skaill, most of the burials within the study area are found in more elevated positions on the hills that separate Skaill and Yesnaby. On the hill of Gryan two substantial barrow mounds (YES061 & YES063) were recorded, each approximately 16m in diameter. Both appear to have been investigated in the past, and the latter site is the location of a cist and steatite urn containing ‘calcined bones’ that was found in 1883 (Watt 1885). A third smaller cairn (YES053) also contained a short cist, and a small steatite cremation vessel (*Ibid.*), and the location of another short cist recorded in the later 19th century (YES182) has subsequently been quarried away (YES049). Two further records from the RCAHMS, of a group of cists (HY21 NW5) and a partially excavated mound (HY21 NW8) lie a short distance outwith the survey area and add further weight to the interpretation of the southern flank of the hill as a focus for burial activity during the later prehistoric period. The ridgeline that curves north and west from South Seatter to the coast at Ward Hill above the Bay of Skaill forms a second clear focus of prehistoric funerary activity, with a total of nineteen sites recorded during the walkover. Individual, isolated mounds are located on the various highpoints of this ridgeline (Figure 5.12). The most notable of these is the Knowe of Geoso (YES059); this substantial mound has been significantly affected by quarrying, however there is some indication of complexity in the earthworks, and the stumps of several massive orthostats form an arc around the southeast quadrant of the site, suggesting a more complex monument than many barrows. Five further mounds (YES110, YES120, YES160, YES168 & YES171) are located in similar positions along the ridgeline, although with diameters of 10-12.50m are significantly smaller than the Knowe of Geoso, and a further ploughed out isolated mound may also be suggested by the low mound and stone scatter (YES081). All these sites show evidence of considerable concentrations of stone, the RCAHMS noted the presence of cramp at the Knowe of Nebigarth (YES171) and structural elements were visible as a result of erosion at two further sites (YES110 & YES160).
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In contrast to these isolated mounds, there are four concentrations of burial monuments that seem to represent small, but distinct barrow cemeteries. The most visible of these is focused on the Knowe of Angerow (YES111); a substantial mound with the exposed remnants of a cist, positioned at the highest point of the ridgeline giving panoramic views across the whole survey area and much of the west mainland (see Figure 5.11). Two further large cairns (YES112 & YES113), both with evidence of stone construction, are situated close by, and form a discreet group.

Figure 5.11 The Knowe of Angerow (left) with a second barrow (YES112) immediately to the south
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Figure 5.12 Distribution of sites along the ridge between Skaill and Yesnaby (looking southeast) Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.

The most substantial of the barrow cemeteries comprises at least five cairns (YES067, YES068, YES069, YES070 & YES114) positioned on an east-west spur of the main ridgeline at Velzian. This group of mounds, each between 8.00-10.50m in diameter, has been heavily plough truncated, all have earthfast stones visible and their position on the ridgeline would seem to
confirm their interpretation as barrows. Another discreet group of barrows was recorded approximately 300m to the south, two heavily plough truncated mounds were noted (YES116 & YES117), although the RCAHMS and Orkney SMR both record the presence of a third mound at this location which was not visible in the field. A further 250m south of this group, two further sites (YES089 & YES090) were noted, both somewhat amorphous and clearly heavily truncated mounds c.15-20m in diameter, with associated concentrations of sandstone. Some of the heights of these barrows have been reduced by as much as 0.5m from those recorded by the Ordnance Survey in the 1960s, and Colin Richards records the destruction of barrows at Velzian during the winter of 1983-84 as a result of deep ploughing (Richards 1985, 5), suggesting that all of the monuments in the area have been heavily affected by modern agricultural practices, and the ‘taking-in’ of hill land.

5.1.7 THE BROUGH OF BIGGING

Another somewhat enigmatic monument which has an extremely close association with water, albeit a very different one from that of the burnt mounds discussed above, is the large promontory fort, known as the Brough of Bigging (YES001). This large, natural promontory, with an area of a little less than one hectare, is connected to the mainland by a narrow neck of land (Figure 5.13).

Four separate ramparts, constructed of earth and stone, run across this neck, although the term rampart is perhaps rather an exaggeration of their stature, with none of the earthworks reaching more than 0.4m in height. The broad outer boundary sits at the landward edge of the neck connecting the promontory to the mainland, and both the form and the presence of orthostatic elements suggest the presence of some structural material, which Lamb suggests is later than the promontory fort itself (Lamb 1980, 77). Immediately beyond this is small, steep sided gully, at the base of which is a small pool, presumably filled by rainwater and spray. At
the top of this gully is a second rampart, at the south-western end of which several courses of dry stone masonry and a possible wall return are visible in an erosion scar. Located at the narrowest point of the neck of land is a further pair of ramparts, the inner of which is formed by a series of cist-like orthostatic structures, whilst the final boundary is visible as a low linear earthwork (Figure 5.14). Each of these boundaries has been positioned to enhance the natural topography, but it is not clear whether the variations in construction indicate different phases of building or perhaps reflect subtly different ways of controlling movement and access to the interior of the promontory.

There is no evidence for any structures in the interior of the promontory fort, but at the south-western end of the promontory, a number of small orthostats, no more than 0.1m high, are visible through the turf. A large stone cairn has been placed at the highest point, the form of which has changed and developed even over the years in which this fieldwork has been
conducted, as visitors have added and rearranged stones. Given its close association with a number of orthostats, as well as the presence of several extremely large stones (c.1x0.6x0.3m) at the core of the cairn, a prehistoric origin cannot be ruled out for this element of the site. More significantly, a number of clearly anthropogenic deposits are visibly eroding from the western edge of the promontory, which takes the full force of westerly gales and Atlantic storms. Because of the erosion these are difficult to fully interpret, but include, shallow pits (see Figure 5.14), apparently containing burnt material (including bone and cramp) and cist like structures, sometimes surrounded by stony/rubble deposits. Additionally one half of a hammer-stone, which appears to have been intentionally broken into two, was noted during one visit to the site. These elements all point towards the site being prehistoric, and non-domestic in nature. However it cannot be established without intrusive investigation whether the features in the interior are contemporary with the ramparts at the entrance, nor indeed is it even possible to ascertain whether these boundary features were all constructed at the same time.

Figure 5.14 The Brough of Bigging – inner rampart (left); eroding anthropogenic deposits (middle); orthostats at south-western end of the site (right).

A second possible promontory fort was identified at the Ness of Rannageo (YES038) where an ephemeral linear, with suggestions of coursed masonry and a possible orthostat, appears to isolate a narrow promontory. This possible linear does not present a clear barrier from the ‘outside’, whilst forming a fairly steep slope when approached from the interior of the
promontory, and the interpretation of the site as anthropogenically modified is extremely tentative, although the location nearby of a second ephemeral dyke (YES039) apparently prehistoric in origin, may add some weight to this interpretation.

5.2 EYNHALLOW SOUND STUDY AREA

The decision to record all sites in the Eynhallow Sound survey area using the same code, rather than separating them into Rousay and Evie areas, was taken to reinforce the idea that the transect across the sound was a unified study area. This is further enhanced when considering the similarities in landform and the positioning of sites on both sides of the sound. Both Evie and Rousay are characterised by considerable relief – narrow coastal strips provide the only cultivable areas, with the slopes rising steeply behind, up into large areas of hill land and peat bog.

5.2.1 THE COASTAL SLOPES

The comparatively narrow coastal strips on both the northern and southern edges of Eynhallow sound provide the main focus for prehistoric activity and in particular settlement activity. This is most clearly evident when considering the Iron Age settlement. A total of seven Iron Age sites were recorded in the study area. On Rousay three sites North Howe (EHS113), Midhowe (EHS130) and South Howe (EHS131), are clustered close together. Whilst to the south lies the Knowe of Swandro (EHS139), and the Neolithic tomb of Knowe of Rowiegar (EHS137) which when excavated in 1937 proved to have been reused during the Iron Age (RCAMS 1946, 218-220). On the southern side of Eynhallow Sound two further broch sites were recorded, the Knowe of Grugar (EHS006) and the Broch of Burgar (EHS002).
The Midhowe area of Rousay represents a key focus of prehistoric activity from the Neolithic onwards. The tomb at Midhowe (EHS129) was, before excavation in 1932-33, an oblong grass
covered mound, measuring approximately 30 x 9m and 2.7m high, with the tops of a row of stones peeping through the turf in a straight line near its western margin (Callander & Grant 1934b, 320), a form presumably similar to that which it had during the Iron Age. Approximately 100m to the north is the broch of Midhowe (EHS130) excavated in the early 1930s (Callander & Grant 1934a) to reveal a well preserved broch and extramural settlement built on a small rocky promontory bounded by geos to both north and south. Within a few hundred metres lie two further brochs North Howe (EHS113) and South Howe (EHS131), their names indicative of their respective positions.

Figure 5.16 Distribution of prehistoric sites and key place names within the Eynhallow Sound survey area (looking northwest) Rousay is to the right and Evie to the left. Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.

North Howe is a massive grass covered mound, some 100m in diameter, located within gently sloping pasture a short distance from the shoreline. Sections of masonry and orthostatic structures are exposed in several places within the mound, no doubt as a result of stone robbing, with the material probably being reused in the construction of several small planti-
crues (small, post-medieval, dry stone built enclosures for the cultivation of garden crops), positioned on and around the mound (RCAHMS: HY33 SE73). What appears to be the main broch structure itself is visible as a discrete circular mound approximately 17m in diameter, with a curving section of well built, coursed, dry stone masonry visible to the northwest.

In contrast South Howe is a much less imposing mound, having been heavily damaged by marine erosion, and the construction of the post-medieval steading of Brough (EHS152) which overlies part of the inland side of the site. The central circular structure is visible as a sub-circular mound, with a significant portion of the curving broch wall, surviving to a height of 2.5m and approximately 4.2m wide at its base, together with extramural structures, having been exposed by marine erosion (Figure 5.18). The fields around these sites have been heavily cultivated for many hundreds of years, removing any hint of earthworks, and the absence of sites from this area is striking (see Figure 5.15). Three find spots do provide some evidence of activity beyond the sites themselves – a stone axehead (EHS136) and a number of flint artefacts (EHS135) found in the field above Midhowe, seem more likely to relate to the tomb,
or perhaps suggest the presence of Neolithic settlement, whilst a zoomorphic penannular brooch and a small piece of bronze chain (EHS134) were found near North Howe, during ploughing in the early twentieth century.

Figure 5.18 South Howe (EHS131) the impact of coastal erosion can be seen on the massive broch wall and extramural settlement.

Given the close proximity of the three brochs, a key question relates to their contemporaneity, and the sequence of construction. Preliminary excavation and AMS C14 dating in 2010 of deposits sealed by the main circular wall suggest that South Howe was constructed probably sometime during the first century AD (Dockrill & Bond 2010). The foundation of the other two sites is uncertain with North Howe remaining unexcavated, and Midhowe having been excavated prior to the advent of radiocarbon dating. Both can be assumed to broadly fall within the middle Iron Age (400-200 BC to AD200), whilst the size of the mound at North Howe, together with the evidence of secondary structures at Midhowe, would seem to point towards fairly long-lived occupation of both. It has been observed that elsewhere in Orkney, those broch sites positioned on higher, sloping ground tend to have earlier foundation dates than
those in flatter, shore-side locations (Carruthers forthcoming). If this is the case then it may be tentatively suggested that North Howe is the earliest of the three sites.

Figure 5.19 Distribution of sites along the coast of Rousay (looking east) Note that the settlements (137 & 139) are both built on Neolithic tombs. Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.

The south side of the Bay of Swandro forms a second focus of prehistoric activity, with two sites, the Knowe of Rowiegar (EHS137) and Knowe of Swandro (EHS139). The semi-circular mound at Swandro has in the past clearly been affected by coastal erosion, and there is also evidence for some archaeological excavation, perhaps one of Grant’s unrecorded investigations (Reynolds & Ritchie 1985). Despite being previously identified as a broch excavation as part of the ‘Orkney: Gateway to the Atlantic’ project has instead identified a multi-phase site, at the heart of which appears to be a large circular chambered tomb, presumably Neolithic in date. Over the tomb a series of later, orthostatic structures have been built; the form, and presence of pottery, bone and midden material suggest Iron Age domestic structures, and the dating of at least one phase has been confirmed by an AMS C14 date of
25BC – AD130 from a carbonised barley grain from one floor surface (Dockrill & Bond 2010; 2013).

Figure 5.20 Bay of Swandro. The location of the tombs and Iron Age settlement at Rowiegar (right) and Swandro are highlighted (looking south).

The site is positioned slightly off centre of the Bay of Swandro, on a low coastal ridge defined by the sea to the southeast, and low lying boggy ground inland (see Figure 5.20), and the pairing of a non-broch settlement reusing a Neolithic tomb echoes the arrangement seen at the Knowe of Rowiegar a few hundred metres to the north. Part of the interior of the tomb at Rowiegar was reworked, in the form of a souterrain, which may well be related to the rectilinear structure which overlies, and extends from the northeast side of the cairn, near the northern end. This structure, apparently aligned east-west, and combining masonry foundations and orthostatic dividers, together with a socket stone is dated to the Iron Age by numerous sherds of pottery, as well as spindle whorls, a glass bead and a piece of a bronze vessel (RCAMS 1946, 218-220). No more specific, scientific dates are available however the rectilinear form might suggest a later Iron Age origin for the building.
In Evie, on the southern side of Eynhallow sound, a very similar pattern of distribution can be seen as that around Midhowe, with the main prehistoric sites being positioned on the fairly flat coastal strip below 40-50m OD. At the northern edge of the survey area lies the Neolithic tomb at Burgar (EHS008), much as described by Davidson and Henshall (Davidson & Henshall 1989, 105-106) although now somewhat closer to the shore. To the south-east along the coast are two brochs, approximately 600m apart, the Broch of Burgar (EHS002) to the northwest and the Knowe of Grugar (EHS006) to the southeast. These sites are visible as substantial mounds, with earthworks suggesting the presence of extramural settlement. Both are much damaged by unrecorded antiquarian investigations, and at Burgar in particular several stretches of well-built masonry are visible (Figure 5.22).
Outwith these three substantial monuments, there is comparatively little extant earthwork evidence of archaeological features. A large spread, but well-defined mound (EHS007) seems at odds with the surrounding landforms, and is perhaps prehistoric in origin, but may be natural. In general cultivation appears to have been so heavy that the only sites of any note were identified along fencelines and at the coast where the plough had not reached the edges of the fields. The presence of an earthfast slab (EHS027) and a possible section of coursed masonry (EHS005) eroding from the bank of the burn of Grugar, both hint at further activity around the two brochs although it is impossible to ascribe dates or functions to such ephemeral features. More significantly alongside the burn to the northwest of Burgar farm, is a burnt mound (EHS010), the size, and presence of surrounding earthworks, suggesting this is represents a considerable focus of activity during the Bronze Age. One final site is worthy of
mention, a large, partly grassed over, quarry (EHS009) in which several large slabs appear to have been abandoned after quarrying; it is tempting given its size and location near to the tomb to think that this may be the source of the material for its construction, however it may just as easily have provided the stone for the construction of the broch, or indeed the farmhouse.

Figure 5.23 Burnt mound (EHS010) alongside the burn below Burgar farm (looking southeast)

5.2.2 EYNHALLOW

The island of Eynhallow was surveyed in 2007, but for the purposes of this research the sites have been renumbered in order to fully integrate them with the results of the walkover surveys in Evie and Rousay. The original site numbers are recorded in the site gazetteer (appendix 2) and full details of all the sites are available in the original report (Moore & Thomas 2008).
Figure 5.24 Distribution of sites on Eynhallow (looking west-northwest) The area of rig-and-furrow and post-medieval occupation on the low-lying south side of the island likely masks other potential prehistoric sites. Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.

In terms of topography, soils and flora the island can be seen as a miniature version of the other landforms discussed in this chapter. The south-eastern shoreline is low and sheltered with a narrow cultivable coastal strip which extends along the shore to both the northeast and west, this reaches its greatest extent in the southern corner, where post-medieval rig and furrow, and settlement covers a little less than a quarter of the island. The rest of the coastline is formed by fairly low, but dramatic cliffs that take the brunt of Atlantic storms and have no doubt been the subject of considerably greater marine erosion than the low-lying shoreline to the southeast. The main body of the island reaches a maximum elevation of approximately 40m OD, and is separated from another smaller hill to the east, by a narrow valley known as the Grange. The remains of the post-medieval infield and the coastal strip are now covered with rough grassland, whilst the rest of the island is typical of hill-land throughout Orkney, and shows a small amount of peat cutting. Although a number of distinct geo-morphological areas
can be identified, the island will be treated as a whole in the following discussion, with mention being made of particular landscape features where relevant.

Despite the high level of preservation afforded by the lack of modern cultivation, and the apparently important location of the island, there is comparatively little evidence for prehistoric activity. Such activity within the infield boundary may have been masked or destroyed by the rig-and-furrow cultivation and a number of anomalies in the gradiometer survey (Moore & Thomas 2008, 13-16), suggest features that precede the AD 12th-13th century monastic settlement (Gibbon 2006, 487) although whether these are prehistoric in nature is of course impossible to ascertain without invasive investigation.

Of those prehistoric features that were identified, by far the most common were funerary monuments. The mound excavated by Mooney (1923) was originally interpreted as a hut circle or roundhouse (EHS040) but a funerary interpretation seems more likely given the absence of midden or other domestic materials from the site. A second site (EHS049), very similar in nature was noted approximately 100m inland. Both sites are situated on the low-lying coastal strip and appear to be orientated on the island of Gairsay to the southeast (see Figure 5.25); whilst a third isolated orthostat (EHS039) may represent a similar feature, although the remains are somewhat indeterminate. Two barrows (EHS050 & EHS051), positioned in a typically prominent position on the ridge to the northeast of the modern lodge, form a second group of funerary monuments. Both are approximately 5-6m in diameter, with evidence for kerbed masonry, similar in nature to others excavated in Orkney, for example Mousland, Stromness (Downes 1994). Several other similar mounds were also noted in the survey (EHS 048; 070 & 071) although their identification as funerary monuments is more tentative given the lack of apparent stonework.
Evidence for non-funerary activity is even more sparse, the most definite being the distinctive kidney-shaped mound on the coast at Fint (EHS042), which gradiometer survey confirmed as being formed from highly magnetised material similar in nature to other known burnt mounds that have been surveyed in Orkney (Moore & Thomas 2008, 9). At Kyarl, on the northeastern corner of the island are two areas of jumbled stonework (EHS043 & EHS045). Although both of these areas are confused by encroaching storm beach material, it is possible to discern small stretches of dry stone walling, as well as several orthostatic elements. The latter site, has been interpreted as a prehistoric settlement (Lamb 1982), but the highly exposed position on the ‘upland’ side of the island, might suggest instead that these are funerary structures, perhaps mirroring the stalled cairn only a kilometre away at Rowiegar (EHS137). Several large banks 3-5.1m in width (EHS090, and possibly EHS087, EHS089 & EHS092) may represent traces of prehistoric land division, and in places appear to underlie accumulations of peat; these features are difficult to date and may well have been reworked and maintained over considerable lengths of time. Another section of sub-peat dyke (EHS093), presumably prehistoric in date, was noted to the west of the modern lodge, and although considerably disturbed by peat cutting, there are hints of terracing and an enigmatic curving stone feature which suggests a more complex site.
5.2.3 The Rousay Hills

The hillsides above the coastal area on both sides of Eynhallow Sound can be sub-defined, according to their steepness, and as with the aforementioned coastal areas, there is considerable similarity in both landform and site distribution, on both sides of the sound. The steep hills which make Rousay so visually distinctive, provide a focus for burial monuments that in some respects echoes that noted in the Yesnaby-Skaill study area, although the topographic relief and subsequent land-use practices are significantly different.

Figure 5.26 Sites recorded in the upland areas of Rousay (looking east) Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.
A single mound (EHS105) seems likely to be associated with the Knap Knowes group of cairns in Quendale, excavated by Grant (1937), sharing as it does a common northwest facing slope. The majority of the barrows noted in the survey are instead positioned on the southwest facing slopes of Mansemass Hill and Ward Hill. On Mansemass hill two cairns are positioned towards the back of one of the terraces, approximately 80m apart. The larger of the two (EHS114), identified by then County Archaeologist Raymond Lamb, in 1980 is a substantial sub-oval mound, in which a number of earthfast stones are visible, whilst the second mound (EHS115) although smaller, appears to have a small cist eroding from its northeast side. A third mound (EHS141), also first noted by Lamb during his field visits is situated at the front of another terrace approximately 25m lower.

Figure 5.27 Cairn (EHS114) positioned at the back of the terrace on the Rousay hillside (looking northeast)

A larger group of mounds is located on Ward Hill. A group of four small mounds (EHS151) located by Lamb (1982, 19) on the front edge of the terrace below the summit could not be identified during the fieldwork. A more substantial, but much mutilated mound, approximately
Chapter Five: Surveying the Later Prehistoric Landscape

14m in diameter (EHS147) is located at the summit, and is overlain by a dry stone structure (EHS148), presumably the surveyors’ cairn referred to by Grant (1937, 82) in his summary of his excavations of burial mounds on Rousay. A short distance to the south lies another burial mound (EHS149), again positioned at the front of the terrace, with an exposed cist much as described by Grant (Ibid.).

In addition to the focus provided by the summits themselves, a second well-defined locale can be identified in the interior of the Rousay hill-land. This area focuses on the Peerie and Muckle Water, with the surrounding hills forming a natural bowl, connected to the coastal strip by two narrow valleys to the south at Westness, and the northwest above Quandale, and a third broader and gentler valley to the northeast at Sourin. The evidence for prehistoric activity in the interior of Rousay is sparse, although a number of later sites, presumably post-medieval shielings (EHS103, 127 & 143) were noted, which speaks to a different exploitation of the area during the historic period, and hence different levels of survival and visibility. Two mounds were noted on the northeast facing slopes of Mansemass hill, one a small mound (EHS126) c. 3.5m in diameter with an earthfast stone visible at the top, whilst the second (EHS142) is of a similar size, but has no obvious stone content. Two further small mounds (EHS144 & EHS145) were located alongside the Burn of Myres; in both cases orthostats are visible which might tentatively be related to cist-like structures.

This discreet locale is focused on the two small lochs, and the presence of a roundhouse or hut circle (HY42 NW6) to the south of the Peerie Water and presumably of late prehistoric date, together with a number of other poorly located, but clearly prehistoric finds, including a leaf-shaped flint blade (HY43SW 11) and a perforated stone hammer (HY42NW 26) to the east, suggests that the main focus of prehistoric activity may lie to the northeast outwith the study area itself.
5.2.4 The Evie Hills

The more even slopes that characterise the hills on the Evie side of the study area are similar in nature to those slopes on Rousay above the well cultivated, lower-lying fields, but below the modern road. Much of this north facing area has only been ‘taken in from the hill’ in the last few hundred years, and the primary features of archaeological note are the various derelict steadings which were generally abandoned during the 19th century (see Figure 5.15). Although today some of these areas have been enclosed, the fields are generally given over to rough pasture, and as a result a range of earthen dykes and enclosures are still visible as extant features. A combination of the generally shallow soils, and the absence of intensive modern cultivation of these comparatively gently sloping hillsides, should provide comparatively good conditions for the preservation of earlier archaeological features, and the complete absence of prehistoric mounds and monuments, would suggest that this is representative of the original prehistoric distribution of sites.

Much like the interior of Rousay a distinct locale can be identified on the back (southern) side of Burgar hill. The area described here forms the upper end of a peat covered valley, centred on the Burn of Ennisgeo, and which slopes gently down to the northeast, towards the Loch of Swannay (Figure 5.16). Only two sites that appear to be prehistoric in origin were noted during the survey although the location of two clearance cairns (EHS016 & EHS017) may suggest proxy evidence for further activity. The mound at Howana Gruna (EHS015) is approximately 2.5m high and more than 18m in diameter. A hollow in the top, in which exposed stonework is visible, suggests that an unrecorded excavation, presumably in the antiquarian period, has been undertaken. There is no clear evidence to suggest a function or date, but the size and location would perhaps be more indicative of a Neolithic tomb. The only other site is a low, stony mound positioned alongside the burn (EHS014), and whilst there is no visible evidence of
burnt material, the form and location would be consistent with an interpretation of the site as a burnt mound.

Figure 5.28 The possible Neolithic tomb of Howana Gruna (EHS015) (looking east)

I would suggest that these sites and the associated landscapes form distinct and discreet locale, clearly separated from the main areas of prehistoric activity orientated around the marine environment of Eynhallow Sound. This area would appear to focus outwith the study area towards the Loch of Swannay, perhaps relating to the two crannogs (HY32 NW5; HY32 NW6) located on its southern shore.

5.3 LATER PREHISTORIC LANDSCAPES

The preceding sections have clearly demonstrated the important relationships between topography and archaeological sites. These relationships can be considered at several different scales, and at each level of analysis it is possible to identify trends and patterns that provide
evidence with which to explore the ways in which the landscape was structured, both physically and conceptually, by people during the later prehistoric period.

At the most coarse level of consideration, three distinct types of landform can be identified: lowland, upland and sea. The lowland generally encompasses the areas of cultivable land and would appear to form the focus for the vast majority of prehistoric settlement activity. The upland by contrast has been less intensively utilised, primarily having been a particular focus for the dead of the later prehistoric communities, although a considerable breadth of sites has been identified within the two study areas. The sea has, as a result of the data collected and discussed above, been comparatively under considered in this chapter, however some observations as to its role within prehistoric landscapes will be made below. Within such a summary of course, the locales and groups of sites detailed above make it clear that there is considerable variation and subtlety in what might have been regarded as upland and lowland in the past. The physical and mental creation and maintenance of a series of spaces and places within the landscape would, I suggest, have drawn on two key threads, the physical – particular landforms and changing environmental conditions – and the social, both in terms of changing socio-economic structures, and of cultural beliefs and values. By identifying these spaces, and exploring the relationships between sites and their environment – both natural and cultural – it is possible to consider the manner in which cultural values affected their construction and how this changed over time.

When considering the relationships between Late Bronze Age – Early Iron Age sites, the large number of burial monuments is in sharp contrast to the restricted evidence for settlement. Within the study areas both the landscapes of the living and the dead are focused in more upland locations, although the survival and visibility of remains from the period in lower lying areas has almost certainly been affected by several millennia of subsequent cultivation. Within
this apparently incomplete picture it is possible to identify subtleties in the positioning of sites, which suggests our understanding of their distribution and of the Late Bronze Age – Early Iron Age landscape may not be as poor as it initially appears. An observation of the association between hills and Bronze Age funerary monuments is hardly new, however when the orientation of some of the ‘cemeteries’ identified above, and their relative location to the settlement and burnt mounds, is considered a more nuanced understanding of these landscapes begins to emerge.

In the Yesnaby-Skaill study area, those barrows which form cemeteries are orientated across the contours. The three groups of mounds at Velzian are all orientated east to west, running down the slope from the hilltops towards the coast, whilst at Gyran the funerary monuments are also arranged in a linear manner, following the prominent ridgeline which runs north to south. The location of the roundhouses and enclosures on the Peerie Hill and Billia Fiold, eloquently make the point that the hills were not the sole preserve of the dead. What is distinct are the differences in landform. In contrast to the siting of barrows on sloping terrain, the settlements are positioned on low hills or knolls. These comparatively small, level areas, whose long axis runs northwest-southeast, are surrounded on all sides by lower lying ground, to create distinct hilltop locales. This picture is further expanded when we also consider the relative locations of the burnt mounds, which are generally positioned in lower-lying areas alongside burns, and the large sub-peat hill dykes, which run north-south, perpendicularly to the contours of Staney Knowe.

Such an emphasis on linearity has been widely recognised in Bronze Age sites across Europe, in the ways in which landscapes appear to have been ordered (Johnston 2005a; Field 2008; Fleming 2008, 196-199) and such structuring concepts have also been identified elsewhere in Orkney (Downes 2009; Downes & Thomas 2013). This is not of course uniformly the case; the
burials located in the machair at Skaill are of course very low lying, a distinctly different location to the hill and ridgeline positions. Sites such as the Links of Notland, Westray, also suggest that in some cases there was a comparatively close location of burials and broadly contemporary settlement (Moore & Wilson 2011). There are then variations in the siting of these funerary monuments, and of course there is also variation in the forms of some of these monuments, and indeed the practices of interring the dead. However there is sufficient evidence to suggest strong trends in particular orientations with these prehistoric funerary landscapes.

These structuring concepts would appear to be visible in a number of the sites and locales discussed above; the level, roughly east-west aligned settlements at Billia Fiold and the Peerie Hill, and the dykes and barrow cemeteries that run across the contours. As Downes and Thomas discuss, these axes are not absolute concepts, rather these cosmological ideals are mapped by people to their particular topography and experience (Downes & Thomas 2013). Thus the barrows at Velzian maintain an up-down orientation, albeit one that runs roughly east-west. In contrast the mounds identified in the survey areas on Rousay do not appear to follow such orientations, instead being positioned along the terraces and contours. I would argue this represents a specific and distinct local response to the landforms – the hills in Rousay, are as a result of the differential weathering of the Rousay flagstone (Mykura 1976, 77-80), formed from a series of prominent terraces, separated by near vertical slopes. Thus it is difficult in much of the Rousay hill land to move up- and down-slope, instead one must zig-zag, gradually moving from one terrace to the next. Such a pattern of movement, and the lack of slope, is at odds with the sacred axis or ‘natural’ flow identified by Downes & Thomas (2013). The positioning of the mounds, as close as possible to the break of slope, at the fronts or backs of the terraces, perhaps suggests a pragmatic response to the construction of the funerary
monuments, whilst still associating them with the sacred slope, rather than the horizontal axis of the living.

The Late Bronze Age – Early Iron Age landscapes were then, composed of a series of different spaces constructed and maintained by the interaction between human practice and the physical environment. This is particularly visible within the Yesnaby-Skaill study area, where burnt mounds, domestic settlement and funerary monuments are located in distinct locales across the area, which together with the evidence of agricultural practices provided by a range of boundaries, and possible clearance cairns, creates an extensively inhabited landscape, structured by an underlying cosmological framework and presumably linked together by pathways and the movement of people and animals, which have left little or no archaeological trace.

In contrast to the varied and extensive distribution of Bronze Age sites, all of the Middle (and Late) Iron Age sites are found in coastal locations, and even if we accept the most extreme estimates of marine erosion, these sites would all have originally been located close to the sea. Such a tendency in positioning is hardly unusual, with similar trends having been noted in parts of Caithness (Baines 1999), the Western Isles (Armit 1992, 109-125) and Shetland (Fojut 1982) however the relationships to other areas of the landscape also appears to have been considered by the builders of these brochs. This is particularly well illustrated by the broch at Loupandessness (see Figure 5.9) which is located on the edge of a number of different environmental niches – hill, loch, machair and sea, and similarly the broch at North Howe is located close to the more rugged terrain of Quandale (see Figure 5.19) perhaps in order to access the different range of resources that the area offered. To varying degrees these brochs are located in the landscape in positions that can be regarded as liminal – in that they sit on the boundary between two or more parts of the landscape – but also central – in that the
brochs were located at pivotal points with access, visual links, and perhaps conceptual associations to multiple elements within the environment.

The relationships between settlements also appear to have been quite varied. The brochs at Borwick and Loupandessness are both isolated within their immediate landscapes and the possibility exists for discrete ‘territories’ to have been constructed around each broch, and thus each community. In contrast the three brochs on Rousay – Midhowe, South Howe and North Howe – are intimately related, and a similar phenomenon can be seen in the two Evie Brochs. In both of these groups, the sites are both physically and visually close, and it would have been difficult, if not impossible, for the inhabitants of one site not to have been observed by, and interacted with their neighbours.

5.4 DEVELOPING LANDSCAPES

As a result of recording both historic and prehistoric features, a clear sense of the changing use of the landscape of the two case-study areas can be established. In addition to providing the data that forms the basis for research into later prehistoric landscapes, it also helps to illuminate the changing ways in which the landscape was utilised, and from this it is possible to infer some of the changing ideas and attitudes towards different parts of the landscape.

Within all of the study areas, the walkover survey has resulted in a significant increase in the number of archaeological sites (Table 5.2). A number of factors – previous investigations, modern landuse, and the nature of sites recorded – can be seen to have affected these increases and it would seem likely that they also reflect the varying degrees of activity in the areas in the past. The massive, more than five-fold, increase in the number of sites on Eynhallow can likely be related to the complete absence of agricultural cultivation since the mid-19th century, although as noted above there is clearly potential for further prehistoric
remains to be masked by the well preserved rig-and-furrow. In all of the study areas the inclusion of post-medieval and early modern steadings, and related features represents the most significant factor in increasing the number of recorded sites, being clearly visible on the distribution maps (see Figure 5.1 & Figure 5.15), and no doubt reflecting the increase in population and the beginnings of agricultural improvement during the 18th and first half of the 19th century (Thomson 2008a). This is particularly notable on Rousay, where the previously unrecorded, although in many cases not unknown, sites almost exclusively date to the historical period, but even here a small number of ‘new’ prehistoric sites were noted in addition to those recorded as a result of the intensive work of W.G. Grant.

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Size (sq. km)</th>
<th>Total Records</th>
<th>Overall Site Density (per sq. km)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
<td>Before</td>
</tr>
<tr>
<td>Yesnaby – Skaill</td>
<td>7.47</td>
<td>46</td>
<td>194</td>
</tr>
<tr>
<td>Evie</td>
<td>2.11</td>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>Eynhallow</td>
<td>0.72</td>
<td>12</td>
<td>67</td>
</tr>
<tr>
<td>Rousay</td>
<td>2.02</td>
<td>24</td>
<td>54</td>
</tr>
</tbody>
</table>

Table 5.2 Comparative numbers of total sites before and after the walkover survey

Overall the relative increase in the number of recorded sites can be closely related to the level of investigation previously undertaken in each area; thus the smallest rise is noted on Rousay, the focus of Grant’s investigations (Reynolds & Ritchie 1985), whilst more significant increases in the number of sites are noted in the other study areas. The massive increase in sites on Eynhallow is perhaps surprising given the interest in the island in the past, but underlines the importance of comprehensive survey over the piecemeal investigations that were possible in the past. There is a significant increase in the number of sites in the Yesnaby-Skaill study area, but this is somewhat deceptive; whilst there have been considerable investigations around
Skara Brae, the Yesnaby area has been subject to very little work. A significant increase in ‘new’ sites might have been expected in the Evie study area given the lack of both antiquarian and modern investigations, however there was a comparatively small rise and the majority of these were historic in origin.

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Size (sq. km)</th>
<th>Prehistoric Sites</th>
<th>Prehistoric Site Density (per sq. km)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Before</td>
<td>After</td>
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<tr>
<td>Yesnaby – Skaill</td>
<td>7.47</td>
<td>26</td>
<td>70</td>
</tr>
<tr>
<td>Evie</td>
<td>2.11</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Eynhallow</td>
<td>0.72</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Rousay</td>
<td>2.02</td>
<td>15</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 5.3 Density of prehistoric sites recorded in the case-study areas

By consistently applying the same methodology across the case-studies, we can be confident that the results are a reliable indication of the numbers of sites visible in each area. Thus the differences between the numbers of prehistoric sites in each area (Table 5.3) are likely a product of the levels of archaeological survival and visibility, and/or the ‘original’ level of activity and occupation during prehistory. All the areas have a range of upland and lowland areas, and with the notable exception of Eynhallow all have been subject to broadly similar levels of agricultural cultivation. Areas of upland in both Evie and Yesnaby-Skaill have, during the last century, been taken into cultivation ‘from the hill’, and one might expect a similar level of visibility of archaeological sites in these areas. This is however not the case; for example many of the barrows recorded in the Yesnaby-Skaill survey lie in areas of comparatively recent cultivation, but in contrast no prehistoric sites were recorded in similar areas within the Evie study area. Similarly all areas provide numerous examples of abandoned post-medieval steadings and enclosures which are still visible as extant features which imply in at least some
parts of each case-study areas, that subsequent ‘modern’ agriculture has not been so intensive as to destroy and level all the prehistoric features in some areas and not in others. There are almost certainly monuments that have been damaged and obscured, however I would posit that the impact of agricultural cultivation has been broadly consistent across the different study areas, and therefore that the differences in site distribution between the different case-studies are a product primarily of choices in the past.

Further it is possible to suggest that areas which today might be regarded as similar, for example the upland areas around Staney Knowe and Cringla Fiold in Yesnaby, Burgar Hill in Evie, and Ward Hill and Mansemass Hill on Rousay (see Figure 5.2 & Figure 5.16 for the locations of these places), may in the past have been used and understood in subtly different ways. When considered in more detail Burgar Hill, with its north-east facing slopes and comparatively thin topsoil, can be seen to be clearly different to the steep, south-west facing slopes of Ward Hill and Mansemass Hill on the other side of Eynhallow Sound. The slopes of Cringla Fiold and Staney Knowe are nearly as steep, but rather than running down to the coastal plan and the sea, these north-facing slopes drop down to the lower-lying ridges of Billia Fiold and the Peerie Hill. Such differences are also reflected in the apparently different practices undertaken around each, with the Rousay hills a focus of burial, the slopes of Staney Knowe being structured through the building of cross-contour dykes, and Burgar Hill being apparently unused, or at least a place for practices which left little or no archaeological trace.

These variations and trends within the archaeological record represent the results of human practices that are enmeshed within the cultural values of the societies in which people lived. These practices were always undertaken within localised contexts and inevitably the identification of a particular trend or model, which we might label as a cultural norm, will also identify examples that do not fit. Such anomalies can be seen as a deviation from the accepted
principles that determined the placement of certain activities, and therefore certain sites, within the landscape. Such deviant sites are often excluded from further analysis – aberrations that will obscure our understanding of larger social structures and cultural forms; in doing so we also obscure the mess and chaos of human existence, establishing models of landscape use which, at least implicitly, are representative of a cultural group over many generations.

A similar sense of a timeless absence of change is also implicit in the ways in which areas of the landscape are defined and identified in modern Western society. ‘Nature’ is maintained, at least institutionally, as something distinct and separate from the normal lived world (Vergunst 2012, 175-180) and as a consequence certain areas are identified as wild, or marginal, or conversely as economically viable, or as cultivated. Thus in Orkney ‘hill-land’ – areas of heather, heath and peat that may or may not be topographically elevated – is distinctly ‘natural’ against the cultivated landscape of grassland and occasional arable field (Lee 2007). Such a fragmentation of landscape, of culture and nature, is not of course a universal truth, with examples such as modern Japanese Buddhism (Johnson 1993) and the prehispanic period in the Andes (Sampietro Vattuone et al. 2008) of societies in which there is little or no separation between nature and culture. Therefore although providing a useful means of thinking about, and describing, different elements of the landscape it is important to remember that such ideas are culturally specific and that in labelling different parts of a landscape in this way, localised concepts of landscape – drawing on specific histories, mythological knowledge, experiences and practices – can be obscured (Gray 1999; Mackenzie 2004; Vergunst 2012). As such an approach is favoured in which the unique nature of each locale is considered at more local and intimate scales, in an effort to draw out both the similarities and differences in the ways in which people created, reworked and maintained the places in which they dwelt during the first millennium BC, and this provides the theme for the next two chapters.
5.5 CONCLUSIONS

Despite the variable levels of preservation within the two study areas, the distribution of Bronze Age sites appears to indicate an extensive use of the landscape, structured at a large-scale by a well understood cosmological framework. This cosmological ordering was neither based on absolutes, and nor was it slavishly adhered to. The dynamic interaction between people and the environment in which they were dwelling and burying their dead, will have been structured by a cosmology in which different elements were emphasised, subverted or adapted to best fit the particular ‘grain’ and character of the landscape, as well as economic and social structures. Within these extensive landscapes a series of spaces and places has been identified, and the construction and inter-relationships of these will be discussed in more detail in the following chapters.

In contrast the limited number of Iron Age sites appears to reflect a constriction of the use of space, with little evidence for Iron Age activity beyond the brochs themselves, perhaps suggesting that many practices previously undertaken within extensive Bronze Age landscapes were either abandoned, relocated closer to the settlements, or were being modified in ways that have reduced archaeological visibility. Subtleties have however been recognised in the relationships between the brochs, and their environment, both natural and cultural. Middle Iron Age settlements are perhaps being intentionally positioned in central, yet liminal locations, on the edges of both the day-to-day agricultural world, and also the more dangerous, and presumably less visited, upland and marine environments. Also of note is the distinction that has emerged between those brochs that are apparently isolated within the landscape, and those that are grouped together. These subtleties suggest a further level of complexity and variety in social and environmental relationships that will be explored further below.
A series of spaces have been identified within the landscapes of the two study areas that draw on the relationships between co-positioned sites and landforms, rather than typological boundaries. Within this spatial structuring a number of trends are visible which reflect the different practices being undertaken within the landscape. Many of these practices may well have been seasonally variable, and whilst some tasks may have involved the whole community, others were no doubt undertaken by specific individuals or sub-sets within the group. Thus these monuments reflect a dynamic and diverse collection of spaces and places whose construction and maintenance drew on different social, physical and temporal scales of practice and on an underlying cosmological framework. The differences between the later Bronze Age – Early Iron Age extensive landscapes, and the more spatially constricted Middle Iron Age landscapes, provides clear evidence to suggest significant changes during later prehistory in both social practices and cosmological frameworks, and the identification of subtle variations between contemporary sites within the two-study areas provides greater scope to explore the identities and relationships of the individuals and groups dwelling within these landscapes.
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6  CHAPTER SIX: CREATING SPACES IN PREHISTORY

The previous chapter established a series of areas, or locales, within the landscape; this chapter will go on to consider these in more detail and to explore some of the ways in which these spaces were created in the past. These spaces are focused on a number of different settlements and the people that dwelt in them, and it is through this dwelling that spaces are structured, created and maintained on both a physical and conceptual level. The physical definition of a space creates a tangible world that articulates experience and heightens awareness (Tuan 1977, 100) and which is more readily classified and controlled (Parker Pearson & Richards 1994, 24). The physical presence of a boundary does not of course imply its conceptual maintenance, and nor does a conceptual boundary require a physical counterpart. However we do not build in order to be able to live within our environment, rather the forms which we physically or mentally build arise within the involved activity and engagement with our surroundings that constitutes our dwelling within the world (Ingold 2000, 172-188). In the case of the later prehistoric landscapes discussed here, this activity and engagement consists of the day-to-day practices of the people living in the settlements on the Peerie Hill and the Knowe of Swandro, and in the brochs at Borwick, Loupandessness, Burgar, Grugar, North Howe, Midhowe, and South Howe.

Geophysical survey remains primarily a prospection technique, often seen as a preliminary step to excavation, and only recently have techniques begun to be incorporated in more holistic ways into research projects and linked to coherent bodies of archaeological theory (Conyers 2010; Thompson et al. 2011). So whilst the walkover survey detailed in Chapter 5 represents a primarily prospective approach, rather than trying to locate further sites using different techniques, the approaches taken in this chapter will focus instead on interpretation. Non-intrusive survey work can provide detailed understandings of the spatial arrangements of
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sites and landscapes, mapping dykes and field systems. But these boundaries and features are not simply a map of past relations, but rather the conditions through which social relationships were generated and learned through the practices which formed the physical remains we now study (Giles 2007c). Thus this chapter will attempt to address specific questions about the nature of the activities and relationships that led to the creation and maintenance of the landscape features recorded during the course of this research.

6.1 YESNABY AND SKAILL

A number of distinct locales were identified in the previous chapter within the Yesnaby-Skaill study area, three of which, representing the main foci of later prehistoric dwelling, will be considered in further detail here: the Peerie Hill settlement and surrounding boundaries and features, and the brochs at Borwick and at Loupandessness in the Bay of Skaill. The more detailed non-intrusive survey undertaken in all of these areas provides a further level of data with which to enhance and develop interpretations of the ways in which people in later prehistoric Orkney structured their landscapes and relationships. The promontory fort at the Brough of Bigging, like the rest of this rather broad and poorly understood class of monument (Henderson 2007, 128-142; ScARF. 2012n), may well not have been continually inhabited but was surveyed in the hope of providing further detail concerning this key feature within the Yesnaby landscape.
Figure 6.1 Yesnaby-Skaill study area showing key locales discussed in the text.
6.1.1 THE PEERIE HILL

The settlements on the Peerie Hill and Billia Fiold, in the hills on the south side of Yesnaby, are associated with a range of dykes forming small aggregated enclosures (Figure 6.2 & Figure 6.3). Given the comparative rarity of such features in Orkney, the earthworks were recorded in detail and approximately 2.35 hectares of gradiometer survey were conducted over the better preserved field remains on the Peerie Hill (Figure 6.4). The enclosures are formed by generally rather low, spread earth and stone banks approximately 1.5m wide and 0.45m high, with the large, irregularly spaced, angular orthostats, and smaller unordered stone likely having formed a foundation for a turf element. The dykes take somewhat irregular, curvilinear courses, but generally follow the contours, in some cases apparently positioned so as to enhance the appearance and apparent height when viewed from down slope. The smaller enclosure elements, ranging in size between approximately 700-3900 sq. m, are generally more strongly defined, with a greater number of orthostats forming a more substantial foundation.

Although clearly visible as extant earthworks these dykes show almost no magnetic enhancement in the gradiometer data (Figure 6.4) – a few positive anomalies, suggestive of concentrations of magnetically enhanced soil, perhaps represent the remnants of a turf superstructure. The rest of the survey area is extremely magnetically quiet. A linear anomaly, likely an igneous dyke, can be seen running NE-SW across the survey area and there are a few other small anomalies, indicative of pits or concentrations of enhanced material. In contrast to this the roundhouse is clearly visible, and there is a close correlation between the earthworks and the anomalies visible in the gradiometer data. The strong responses in these data suggest that the walls are not of a solid stone construction, but rather that there is a significant midden/turf/soil element, presumably forming the core of a wall faced with coursed masonry. Such a construction technique is employed in other roundhouses in the Northern Isles, such as Tofts Ness, Sanday (Dockrill 2007) and Sumburgh, Shetland (Downes & Lamb 2000) and a
similar, late Bronze-early Iron Age, date may be tentatively assigned to the Peerie Hill structure.

![Figure 6.2 View of the Peerie Hill settlement (looking southwest). The roundhouse and small enclosures are clearly visible whilst the earthworks forming the dyke to the west are much less well defined.](image)

In contrast to the small enclosures described above, a series of longer, linear dykes can be seen to have also been employed in the structuring of the upland landscape (Figure 6.3). The physical form of the dykes are superficially similar to those of the enclosures, no doubt as a product of the materials and construction techniques employed, however the orthostatic elements are more broadly and unevenly spaced and there appears to be a greater proportion of loose stone. This is particularly prevalent in the dyke that runs along the southern edge of the Peerie Hill, which is formed from a jumble of stone, clearly very different in nature to the small enclosure dykes. These linear dykes are generally around 1.70m wide and, and particularly in the case of the cross-contour dykes only the top 0.2-0.3m are visible above the surface of the peat. Unlike the irregular, curvilinear nature of the enclosures, these dykes are
uncompromisingly linear, running straight across the landscape, regardless of, and in some instances intentionally perpendicular to, the contours. Neither do these dykes appear to form complete circuits or enclosures, except where they meet aggregated elements. The most westerly dyke focuses on the rocky outcrop of Staney Knowe, but does not form a continuous barrier across the outcrop. These dykes then were used to define linear spaces, approximately 300m wide, within the landscape and running up into the hills (or perhaps vice-versa).

Figure 6.3 Dykes, enclosures and settlements recorded around the Peerie Hill (Looking southwest. Earthworks = orange; watercourses = blue). Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.
Figure 6.4 Composite plot showing gradiometer data and earthworks on the Peerie Hill
Despite the impact of erosion and peat-skimming it is still possible to detect both variation in the forms of the dykes, and also hints of phasing. This is most evident at the south-west corner of the small enclosures on the Peerie Hill. Here the small aggregated enclosure can be seen to clearly overlie the long dyke which runs along the southern edge of the Peerie Hill. Combined with the subtle differences in construction techniques it is tentatively possible to identify two phases of dyke construction. The earlier phase sees the extensive structuring of the landscape being undertaken with the construction of a series of large linear boundaries, including the cross-contour dykes. At some later date, and perhaps associated with the construction of the roundhouses, three or four groups of aggregated enclosures are constructed.

Figure 6.5 Comparison in the types of dykes Left: One of the dykes forming a small enclosure on the Peerie Hill (the figure is standing beside the roundhouse). Right: The cross-contour dyke (YES124) running up the hill.
The form and construction of all of the elements of this extended site would seem to be indicative of one or more late Bronze Age or Early Iron Age farmsteads. The two distinctly different types of dyke (Figure 6.5) represent different practices – both in terms of the ways in which the boundaries themselves are constructed and also the practices undertaken within and between them – and the construction of the walls of the roundhouse would represent a further variation in the form and materiality, with which people divided up and created distinct spaces within the landscape.

6.1.2 The Brough of Bigging

The most dramatic and ostensibly natural ‘site’ within the study area is the promontory fort at the Brough of Bigging. The Brough itself is a roughly oblong area, approximately one hectare in size, which slopes steeply up to the southwest. It is approached across a narrow neck of land that is enhanced by four separate earthworks positioned to take advantage of the natural topography. Although recorded as ramparts these features are all fairly minor impediments to movement, even if they represent the foundations and remnants of more substantial earth or turf elements. The outer rampart appears to incorporates a rectangular structure, which Lamb (1980, 77) has suggested is later than the promontory fort itself, although it is unclear why such a chronology is put forward. The middle rampart is clearly visible in the gradiometer data (Figure 6.6) as a series of rather amorphous anomalies that most likely represent enhanced material that has accumulated, whilst several negative anomalies may be indicative of stonework. A discrete break in the anomalies is visible and corresponds to the possible entrance suggested by a gap in the earthworks. The double inner rampart is by contrast very poorly defined, with an area of slight magnetic ‘noise’ corresponding to the location of a low linear earthwork and a group of orthostats.
Figure 6.6 Composite plot showing gradiometer data and earthwork survey at the Brough of Bigging.
The form of the promontory creates a naturally delimited space; however the construction of the boundary features defines this space as something more, or perhaps different. Within this space the gradiometer data (Figure 6.6) provides little evidence for sustained occupation. Much of the interior is magnetically quiet, with the only clear clusters of features being concentrated at the highest point on the coastal edge of the promontory. These pit-like anomalies, whose form and strength is in keeping with deposits of magnetically enhanced material, correspond to a number of orthostats noted on the surface of the site, as well as deposits of apparently carbon rich soils and cairn-material visible in the erosion scars on the north-western side of the promontory. When considered alongside the fragments of bone & cramp, and a broken stone-tool, which have been noted on the site during the fieldwork, an interpretation of the site as a focus for funerary activity at some point in later prehistory seems almost certain.

6.1.3 THE BROCH OF BORWICK

The Broch of Borwick is positioned on a natural promontory, albeit one less clearly defined as the Brough of Bigging, with the Noust of Borwick, which would have provided direct access to the sea, to the south and the inlet known as Hells Mouth (a corruption of the Old Norse hellir meaning cave) to the north (Figure 6.7). The partial excavation of the site and cliff-top location limits the value and, more significantly, the practicality of further non-intrusive investigation, however inland from the partially cleared extramural settlement it was possible to undertake a gradiometer survey covering approximately 3.5 hectares (Figure 6.8).

Watt, the original excavator records a moat 15-18m wide running across the neck of the promontory, in which a dry stone and earth rampart 2.7m high and between 0.90-1.80m wide, was founded (Watt 1882, 447). The extent to which Watt defined these features is not clear,
however apparent traces of both are visible in the field today and would, in combination with
the natural inlets have provided a small, but well defined area in which the broch and
associated extra-mural structures were situated. The moat itself, transected by the modern
fence line, is not visible within the gradiometer data (Figure 6.8), although a series of negative
anomalies may be indicative of a stone revetment to the outer edge of the feature.

Figure 6.7 Aerial view of the Broch of Borwick (looking southeast) The position of the site on
the promontory is highlighted and the ‘moat’ is just visible, transected by the modern fence
line, inland from the broch.

Immediately outwith the ‘moat’ this is an area exhibiting comparatively little magnetic
enhancement, although there are faint linear trends which appear to relate to the still extant
rig and furrow. A small sub-circular anomaly, between 6-8m across, may represent a structure although it is impossible to date based upon the limited evidence.

Figure 6.8 Greyscale plot of the gradiometer data from the Broch of Borwick.
Beyond these small magnetic responses the data are dominated by very clear linear anomalies, indicative of ridge and furrow cultivation (Figure 6.8). This was also recorded as a series of slight, but well defined earthworks across much of the area (YES042; clearly visible in Figure 6.7). Significantly the extant earthworks cover a larger area than the highly enhanced anomalies, which are bounded to the north and south by two burns, and can be seen to fade out to the northeast, and also towards the broch itself. The strength and comparatively discrete nature of these highly magnetised anomalies would seem to suggest that this later medieval or post-medieval rig and furrow cultivation is reworking and turning over earlier anthropogenically enhanced soils. Such an interpretation is further supported by the depths of soil, in excess of 1m, that are visible eroding out of the banks of the burns which cut across the area. Based on the gradiometer data these soils appear to cover an area of approximately 6000 sq. m and are in keeping with the deepened, anthropogenically enhanced soils recorded in excavations elsewhere in the Northern Isles (Dockrill & Simpson 1994; Guttmann et al. 2006). A number of other linear magnetic anomalies are visible in these data, but these correspond to boundaries visible on the first edition Ordnance Survey map of the area and are thus likely to have a more recent origin.

The ditch, rampart, and roundhouse all define distinct spaces through the use of architectural features, and a large dyke recorded during the walkover survey, and subsequently mapped in more detail, appears to have been constructed during the later prehistoric period to define a further space associated with the broch. This dyke is located approximately 400m north of the Broch of Borwick, from which it is clearly visible, running inland from Stinkna Geo (Figure 6.9) for more than 700m. Towards the eastern end the dyke becomes significantly reduced, presumably as a result of agricultural practices, but whether it previously continued to the southeast is unknown. It is significantly larger than any of the other dykes identified within the Yesnaby-Skaill survey area, up to 10m wide at the base and 1m high, and is an extremely
visible feature within the landscape to the point that elements of it have been reused as a boundary since at least the 19th century when most of the area was uncultivated hill-land. The size of the dyke is in keeping with Treb dykes such as Matches Dike on North Ronaldsay (Lamb 1983, 176) however there are a number of orthostats eroding from the Stinkna Geo dyke suggesting some internal structure. This is in contrast to the Trebs recorded by Lamb (Ibid.) which appear to be simple dump banks of earth, with in some cases a clay core. Lamb (Ibid., 179) suggests that the Treb dykes are part of a land-allotment system which broke down at the end of the Bronze Age; however given the close visual relationship between broch and dyke, as well as the subtle differences in form, I would suggest that the two features may be broadly contemporary, and this relationship will be considered in more detail in Chapter 7.

![Figure 6.9 The relationship between the Broch of Borwick and the Stinkna Geo dyke which runs along the hillside to the north (Looking east; Earthworks = orange; watercourses = blue) Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.](image)
The dyke forms a linear boundary, too long to have been practically defended and not of a form suitable for containing livestock, but that very clearly creates an inside and an outside. Norse linear boundaries in Iceland (Aldred 2008, 309-313) and the Wessex ‘ranch boundaries’ (Sharples 2010b, 45) are, much like the Stinkna Geo dyke, seldom complete or regularly defined, and often make use of natural features. Unlike holdings of land, which are defined in terms of paths, places and surfaces, perimeters such as these are necessary to define a territory (Ingold 1986, 156), and given the relationship between the two, such a territory is most likely to have been related to the inhabitants of the broch.

6.1.4 THE BAY OF SKAILL

The gradiometer survey of the Loupandessness broch was undertaken as part of the geophysical survey of ‘The Heart of Neolithic Orkney’ World Heritage Site, by the Orkney College Geophysics Unit in 2008, and much of the following discussion is drawn from their report (OCGU 2008). The same data collection methodology was employed by the surveyors, as has been utilised for the work conducted as part of this PhD research, but data were reprocessed and plotted at ±5 nanoTesla to ensure consistency in presentation with other sites in this chapter. The gradiometer data (Figure 6.10) are dominated by a large number of anomalies indicative of archaeological features, illustrating a complex palimpsest of multiple phases of domestic and agricultural activity. The broch is clearly visible as a series of circular anomalies and associated responses, however interestingly the areas to the north and south are very magnetically quiet (OCGU 2008, 3), and it is postulated that these may relate to areas of previously boggy ground, or perhaps even a former extent of the loch of Skail. The broch may thus have been positioned on a slightly higher spit of land, surrounded on three sides by water or areas of bog/marsh. A series of negative linear anomalies separating the broch settlement from these magnetically quiet areas may well be indicative of walls or revetments, suggesting that the relationship between the two areas may have been formalised.
Figure 6.10 Gradiometer data from the broch of Loupadessness and the surrounding area (courtesy of Historic Scotland and ORCA Geophysics)
Despite this location and the possible formalisation of the boundary between water and land, there is still evidence of at least two concentric ditches, with possible banks or revetments surrounding the broch settlement. Within this enclosure a circular area, somewhat magnetically quieter and approximately 17m in diameter is likely to indicate the location of the broch itself. There is no clear evidence of an entrance into the enclosure, but the broch appears to be located towards the southern side of the enclosure. Therefore given the trend of brochs being located towards the back of enclosures, this might suggest a broadly northerly alignment at Loupandessness. A number of anomalies appear to be associated with the broch settlement, some extending outside, or perhaps, over the multivallate enclosure, suggesting the settlement was reworked and in use over a fairly long period of time. Such a potential continuation of the settlement into the later Iron Age is also supported by the apparent discovery of a Celtic cross-mould from the site (Stewart & Dawkins 1914).

As well as evidence for a continuation of activity into the later Iron Age, the form of a number of the anomalies may be indicative of early Iron Age structures. Immediately to the west of the broch is a large circular anomaly, with a possible hearth feature at the centre, which faces a smaller annexe, a form similar to the early Iron Age structures seen at Sumburgh (Downes & Lamb 2000). To the southeast are two further clusters of circular or sub-circular anomalies, between 10m and 15m in diameter, which represent either ring-gullies, or midden-filled walls, and several also exhibit central anomalies which appear to have been highly fired – likely representing hearth features (OCGU 2008, 4-5). It is unclear whether these circular anomalies represent contemporaneous roundhouses or the reuse of the same site over several generations, but the form of these anomalies would be in keeping with a later Bronze, or early Iron Age date. To the west of the broch is a rather amorphous area of anomalies, transected by the modern fenceline, and although no distinct forms are visible the responses are indicative
of an area of underlying structural and midden material (OCGU 2008, 4) albeit of an uncertain date.

In addition to these areas of settlement the gradiometer data provides considerable evidence for the anthropogenic enhancement of field soils, and a number of negative linear anomalies may also represent a series of field boundaries. In several areas rig-and-furrow cultivation is visible within the survey data and seems to represent areas of enhanced soil being reworked by the later agricultural activity. Given the palimpsest of multiple domestic and agricultural activities visible within the data, accurate spatial and chronological relationships between anomalies are difficult to ascertain. However the geophysical survey does provide clear evidence for a long-lived, later prehistoric landscape.

6.2 EYNHALLOW SOUND

Unlike the Yesnaby-Skaill study area the majority of the settlement in the Eynhallow Sound study area is grouped together. Although we cannot know whether all of these monuments were contemporary, the clustered distribution of broch and indeed non-broch settlement in this area does provide evidence with which to consider the differing social groupings and interactions that may have been at work during the middle Iron Age. Three clear groups are identifiable; the pair of brochs, Knowe of Grugar and the Broch of Burgar, surveyed in Evie; and on Rousay, the three brochs, North Howe, Midhowe and South Howe, and the two reused Neolithic tombs at Rowiegar and Swandro.

6.2.1 EVIE

The fields of the coastal plain within the Evie part of the study area have been heavily cultivated and as evidenced by the walkover survey, there are only very limited extant earthworks visible at the edges of the fields. Thus gradiometer survey provides an excellent
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means of considering the wider surroundings of the two brochs, the Knowe of Grugar and the Broch of Burgar, which have been previously identified. Although the partial excavation of both sites presented some problems, 4.1 hectares of gradiometer survey was undertaken at Grugar, with a further 2.75 hectares completed at Burgar. Given their proximity, approximately 500m apart, and intervisibility (which will be discussed in more detail in Chapter 7), the results of the survey from the two sites will be discussed together.

Figure 6.11 The Eynhallow Sound study area showing the key locales discussed in the text.
Figure 6.12 Overview of gradiometer survey conducted at the Broch of Burgar (left) and the Knowe of Grugar in Evie.
The gradiometer data around the Knowe of Grugar (Figure 6.12 & Figure 6.13) is generally fairly quiet, and many of the anomalies are apparently geological in origin. A strong linear running approximately northeast-southwest across the edge of the survey area is indicative of an igneous dyke, whilst the rather amorphous curvilinear anomaly to the southwest of the broch appears to be the result of soils banking up against an exposed spur of sandstone (see Figure 6.14), although whether these soils have been anthropogenically enhanced is impossible to ascertain from the geophysical data. There are scattered pit-like anomalies
visible around the broch, particularly to the south and west, and hints of a linear anomaly, perhaps indicative of a ditch, running due south. However none of these can be conclusively related to the broch itself, and whilst they may represent agricultural activity in the vicinity of the site, the levels of enhancement are clearly not of the same magnitude as those noted at the Broch of Borwick.

![Figure 6.14 Looking southwest from the Knowe of Grugar.](image)

The spur of exposed and shallow bedrock is visible as rough ground in the centre of the field.

The settlement itself is clearly visible within the data, defined by a pair of strong sub-circular anomalies, the outer approximately 60m in diameter, representing a multivallate enclosure. These anomalies are at their largest and strongest on the southeast side of the circuit, and although no clear break is visible this would seem likely to represent the entrance into the broch enclosure. A magnetically quieter area, sub-circular in form and approximately 19m in diameter, located towards the ‘back’ of the enclosure is likely to be the broch itself, the absence of magnetic enhancement being a product of the large concentration of sandstone that forms the walling of the structure.
A multivallate enclosure is also clearly visible in the gradiometer data at the Broch of Burgar (Figure 6.15), although the broch itself, having been partially excavated is visible only as a break in the collected data. Much like the Knowe of Grugar the responses from these enclosing features are more highly enhanced to the southeast, perhaps again indicative of the larger and more enhanced ditch terminals often found at the entrance to Iron Age enclosures. Although the definition of the enclosure ditches is confused by the apparent presence of a small area of extramural settlement indicated by earthworks and exposed masonry, both elements are generally located towards the front of broch settlements and thus support an interpretation of
the site being orientated to the southeast. Potentially this also implies a degree of phasing and
reworking of the settlement, although as always an understanding of dating and establishing a
sequence of activity is difficult with two dimensional gradiometer data.

Perhaps more significantly a clear break in the enclosure ditch is visible, apparently forming a
second entrance, approximately 6m wide, orientated almost due south. The terminals of the
ditch have been extended, turning outwards, perhaps as a means of enhancing the entrance.
There is a clear relationship with a linear anomaly, suggestive of a ditch, which extends
approximately 75m to the southwest before turning to run south-southeast. Survey was not
undertaken to the east beyond the burn, so it is unclear whether this ditch continues, however
if it is assumed that the burn formed the eastern limit then this creates an enclosure, a little
over 0.5 hectares in size. Within the data there are indications of later cultivation trends –
possibly medieval or post-medieval rig-and-furrow, and a presumably broadly contemporary
trackway which is also visible as a heavily ploughed out sunken way. However the overall level
of magnetic enhancement beyond the broch enclosure is very low, and rather similar to those
noted at the Knowe of Grugar.

At both the Knowe of Grugar and the Broch of Burgar, the gradiometer data indicates that the
broch settlements were surrounded by a multivallate enclosure and that beyond these there
are further boundary features, which in the case of the latter site, can be closely linked to the
settlement itself. The absence of significant magnetic enhancement of the surrounding soils,
together with the unusual ‘antennae’ ditch at the Broch of Burgar, would suggest a very
different set of agricultural practices, associated with the control and direction of movement
rather than the anthropogenic enhancement of agricultural soils, perhaps suggesting that the
economies of these two sites was focused upon livestock rather than the production of arable
crops.
6.2.2 North Howe, Midhowe and South Howe

As discussed in the previous chapter the Midhowe area represents a key focus of prehistoric activity, but the subsequent agricultural activity has potentially removed and obscured the more subtle archaeological remains in the area. An initial hectare of gradiometer data was collected over the mound of North Howe as part of the research for this thesis in July 2009, then in the summer of 2010, 1.4 hectares of gradiometer survey was conducted in the field above Midhowe as part of the student fieldwork for the University of the Highlands & Islands MSc Shallow Geophysics degree (OCGU 2010). In the spring of 2012 the survey work at North Howe was expanded to cover a total of 3 hectares, in order to provide coverage of the area between, and beyond, the brochs of North Howe and Midhowe. As a result of the substantial post-medieval steading above and inland of South Howe, it was not considered appropriate to undertake geophysical survey at South Howe, given the considerable potential for disturbance from more recent activity and ferrous material.

Midhowe broch itself is situated on a small promontory (Figure 6.16) approximately 1300 sq. m in size, defined by two narrow geos (the Geo of Brough to the north and Stenchna Geo) to the south, together with a complex multivallate barrier ‘of extraordinary strength and a most impressive structure’ (Callander & Grant 1934a, 467-470). Although the coastal position means that marine erosion has almost certainly reduced this promontory in size since later prehistory, the external wall turns west along the edge of a rock shelf above Stenchna Geo and was traced for approximately 20m (Ibid., 467), suggesting that the geo played a clear role in controlling access, as well as defining and locating the site.

The data collected around Midhowe are dominated by a very strong L-shaped anomaly which excavation in 2010 confirmed was a substantial ditch that appears to respect the Neolithic
tomb to the south, although contained no dateable material (Dockrill & Bond 2010, 25). The nature and sequence of infill has been interpreted as a result of the clearance of fieldstone from the area to the northwest, whilst the boundary has been interpreted as a field division associated with the broch and possibly designed to contain cattle (Ibid.), however the incomplete nature of the enclosure and the apparent alignment of the ditch with the entrance to the broch enclosure (see Figure 6.17) must raise a note of caution to such an interpretation. To the southeast beyond the ditch the general level of magnetic enhancement can be seen to be significantly lower than the rest of survey data. However several faint linear features and curving anomalies in this area may represent further ditched features although the limited area makes an interpretation difficult.

Figure 6.16 Aerial view of Midhowe Broch, illustrating the geos which form the small promontory upon which the broch is situated.
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Figure 6.17 Gradiometer survey around North Howe and Midhowe brochs
Figure 6.18 Detail of the gradiometer survey at Midhowe showing the area of midden enhanced soils. The location of the three testpits (red) excavated in 2009 is shown in relation to the area of increased magnetic response.

To the north of Midhowe broch is an area of increased magnetic response (Figure 6.18), located approximately between the Curly Geo and the Geo of Brough. Whilst partially obscured by a strong linear anomaly running northeast that is indicative of another igneous dyke, the responses within the area are clearly magnetically enhanced, although somewhat mixed. Two test-pits excavated within this area in 2009 confirmed the presence of rich midden
soils from which several heavily abraded sherds of Iron Age pottery (Roy Towers pers comm.) were recovered, whilst a third testpit (excavated approximately 20m northeast of the broch ditch) was significantly shallower and contained no evidence of the dark anthropogenic soils noted in the other testpits. Within this area of enhancement there is a negative linear anomaly, which may represent a wall or stony banked feature (OCGU 2010), and a number of rather more amorphous negative anomalies are also visible within the data in and around this area. These may well also represent concentrations of stone, but given their lack of form they seem more likely to represent clearance cairns rather than a coherent boundary.

To the northwest the data are dominated by the responses from the survey covering the mound of North Howe itself. Three distinct elements within this mass of anomalies can be identified. To the north a series of curving positive and negative anomalies are clearly visible, which are likely to represent a substantial multivallate enclosure. Such an arrangement is seen at a number of other sites, both excavated examples such as Gurness and in the geophysical data from several other sites, for example Broch of Burrian, North Ronaldsay (OCGU 2005), and as with these other sites, the ditches and banks or stone revetments, that form the enclosure can be seen to be both discontinuous and also vary in size and number at different points around the enclosure. The broch itself is visible as a comparatively discrete sub-circular negative magnetic anomaly within the enclosure, which corresponds to the location of the structure identified by extant earthworks and exposed masonry. This anomaly is likely a product of the substantial mass of sandstone that would have formed the walls, and is thus clearly visible against the surrounding elevated magnetic values. To the south of the roundhouse are a mass of amorphous positive and negative anomalies extending right to the coast. Although it is difficult to discern any clear form to the anomalies, they likely represent an area of extramural settlement, apparently overlying and extending beyond the line of the multivallate enclosure. Several negative linears may be indicative of a series of walls perhaps
enclosing the settlement. Although this interpretation is, given the nature of the data, tentative, several phases of activity are identifiable that include the reworking and disuse of the multivallate enclosure which would suggest activity continued at the site well into the later Iron Age.

Figure 6.19 Detail of the gradiometer data from North Howe. The possible roundhouses/hutcircles are visible to the north of the main settlement, and the former course of a burn is indicated by the thread-like linear anomalies to the east.
Beyond the broch complex itself there are a number of interesting groups of magnetic anomalies. Immediately to the east a series of thread-like, curvilinear anomalies can be seen running roughly north-south. The rather intermingled and discontinuous nature of these anomalies imply a natural origin, and their location corresponds to a shallow dip in the landscape suggesting that the magnetic responses may well represent a relict stream, the course of which has shifted over time. Whilst impossible to date to the later prehistoric period, the close location and shared alignment between broch enclosure and burn may hint at a degree of contemporaneity, and it is perhaps significant that the burn appears to separate North Howe from the area of midden enhanced soils beside Midhowe.

To the north of the broch, two or three circular anomalies, 10-12m in diameter, are clearly visible. The form and strength of these is consistent with small roundhouses and the surrounding magnetic responses and several clear linear anomalies would seem to illustrate an area of settlement and rectilinear enclosure, which respects, and may even be linked to the multivallate enclosure. The form of these structures could date them to any when during the later prehistoric period; however their position ‘behind’ the broch settlement raises interesting questions about the relationship between the two. To the west of this group of roundhouses and the broch enclosure, is a further area of increased magnetic response. Linear trends, the result of modern ploughing are clearly visible within the data, as are a variety of diffuse positive and negative anomalies. Overall this area is broadly comparable to the increased magnetic responses noted to the northwest of Midhowe, and as such a similar interpretation of midden enhanced soils can be posited.

The gradiometer data, when considered alongside the other structures in the area such as the stalled tomb, and the broch at South Howe, provides clear evidence for an intensively occupied landscape that has evolved over a considerable period of time. The data illustrates
that people during the later prehistoric period were manipulating their environment, both in terms of modifying soils – presumably to improve agricultural productivity – and also enhancing and drawing upon the natural features, such as the geos and burns, to structure and control movement between different settlements.

6.2.3 Bay of Swandro

The Knowe of Swandro and an area of the field inland from the site were surveyed in April 2011. In total 3.7 hectares of gradiometer survey was completed; the small area around the mound was under fairly rough ground cover and the upslope field was under pasture, and in both survey areas there were boggy and flooded areas which it was not possible to survey. The site itself also forms the focus for excavation as part of the NABO Orkney: Gateway to the North Atlantic project and has confirmed the archaeological nature of the mound (Dockrill & Bond 2010). The crescent-shaped mound is visible in the gradiometer data as a large curving negative anomaly on the southern edge of the survey area immediately above the beach (Figure 6.20), the nature of the anomaly suggesting it represents a large concentration of stone. This was initially interpreted as most likely the wall of a substantial Atlantic roundhouse, an interpretation apparently confirmed by the excavation of orthostatic structures, hearths and midden deposits dating to the first century AD (Dockrill & Bond 2013) which appeared to relate to a substantial curving wall face. However, further excavation as part of the NABO project in 2012, revealed the wall to be part of an extremely well built cairn, likely a Neolithic chambered tomb. Excavation has demonstrated that the Iron Age structures extend over part of the cairn, as well as continuing to the southeast, and it is likely that the large positive and negative anomalies clustered to the east of the curving anomaly represent a further continuation of these structures, however they are further confused by the presence of the Norse farmstead excavated in the 1960-70s (Kaland 1993).
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Figure 6.20 Summary greyscale of gradiometer data from the Knowe of Swandro
The majority of the data beyond the site itself are dominated by anomalies of a geological origin. The strongly enhanced linear running southwest-northeast is indicative of an igneous dyke, whilst a second large positive linear that runs approximately perpendicular seems likely to also be geological, although not igneous, in origin. Most striking are the large areas within the data that are extremely magnetically quiet; these correspond to a low-lying and boggy area which extends into the field. Although environmental data from Swandro itself is currently lacking, archaeological and environmental investigation of the Bay of Moaness, immediately to the south, suggests that during the Neolithic the bay would have been a freshwater loch, probably separated from the sea by a sand or shingle ayre (Buckland et al. 1998). The recording of buried midden in testpits extending southwest from the Knowe of Swandro, into the inter-tidal zone (Dockrill & Bond 2013) further demonstrates that the location of the site during the prehistoric period may have been considerably different.
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Upslope from the Iron Age and Norse settlements are a number of further anomalies. Appearing to share an alignment with the Norse farmstead, a series of linear features define a trapezoidal area, approximately 0.1 hectare in size. Anomalies within this area suggest a degree of enhancement of the soil, and several pit-like anomalies may represent discrete features or deposits of archaeological material, and it seems likely that this area represents a small garden or enclosure associated with the Norse farmstead. In the eastern corner of the survey area, a clear group of positive anomalies can be seen covering an area of approximately 500 sq. m. Although there are no obvious structural elements, the strength and form of these anomalies seems likely to indicate a small area of settlement activity, probably prehistoric in nature. There are a number of other anomalies towards the north-eastern side of the survey data, which appear archaeological in nature however they are incomplete, apparently continuing beyond the completed geophysical survey, and are thus difficult to interpret.

The impression, albeit tentative given the ongoing excavation, is of a complex multi-period site stretching from the Neolithic through into the Norse/Viking period. However during the Iron Age there is no evidence for a substantial broch settlement, similar to those seen elsewhere in the study areas. Instead the form, as well as the association with a Neolithic tomb, is similar to the non-broch structures from Phase 3/4 at Howe (Ballin Smith 1994, 26-29), and Phase 5 from Pool (Hunter 2007, 77-83). This evidence, together with the reuse of the Knowe of Rowiegar, suggests that the sites around the Bay of Swandro represent a distinctly different pattern of activity to those characterised by the three brochs to the north-west, but the limited dating evidence obtained by excavation so far suggests that these may, at least in part, be contemporary.
6.3 CREATING SPACES

6.3.1 SPACES AND AGRICULTURAL PRACTICES

The data presented within these case studies provides evidence for a number of spaces that were defined, created and reworked through a range of different agricultural practices. Many of the spaces detailed are defined through the presence of physical boundaries; however there is another series of spaces within the two study areas, in which it appears that it is through certain practices that distinct spaces are created, rather than through the clear bounding of an area.

The gradiometer data from several of the other broch sites within the study area provides evidence for the anthropogenic enhancement of the soils around these settlements. The most dramatic indication of this comes from the Broch of Borwick, where significantly elevated magnetic responses provide evidence for a plot of anthropogenic soils. At North Howe and Midhowe on Rousay, as well as at Loupandessness broch in the Bay of Skaill, similar anomalies were also noted, albeit not as strong as those from Borwick. These soils constitute the material traces of centuries of cultivation practices and the medium for numerous social interactions, and also have represented an economically and symbolically valuable resource to the communities who worked these soils.

Although subsequent cultivation and the difficulties of dating features recorded in geophysical survey data must raise a note of caution, the gradiometer data from these sites provides evidence for a similar set of practices. The area covered by these increased responses is generally fairly small, ranging between 0.6 and 0.8 hectares, and with the exception of Midhowe, where there are hints of stone boundary features, perhaps representing a wall or stone clearance, there is little evidence for physical enclosure of these soils. This is broadly in
keeping with what little is known of Iron Age cultivation plots elsewhere in Scotland, which are often very small, unbounded areas, apparently set aside each year for cultivation (ScARF. 2012f).

These data suggest, for some broch settlements at least, that during the middle Iron Age there was a great commitment to, and investment in, intensively cultivated and manured fields. Long lived, if not necessarily continuous, occupation of settlements and cultivation plots would have provided the conditions in which more intensive strategies could be adopted, developing towards a more permanent and long-lasting commitment to place and landscape (Johnston 2005b) and as these soils developed there must have been an increasing relationship with the past – the soils effectively becoming a form of social memory. On a yearly basis pieces of broken material culture – pottery, bone (both human and animal) and partially composted organic material, would have been spread upon the fields, or indeed cultivated in-situ (Guttmann 2005; Guttmann et al. 2006). Thus in the tilling of the soil the members of the social group would have encountered both material remnants of the previous year, and also of the preceding seasons of agricultural activity. These would in some cases be familiar artefacts, either encountered during previous episodes of cultivation or even from material that had been discarded by that person – each evoking a small moment of memory, a reminder of the tie between place and person. Those pieces of unrecognised, perhaps heavily abraded and decayed material would have further highlighted the depth of time that had gone into developing these soils.

These soils then are very clearly not a passive surface, or background, on which Iron Age life was played out. These soils are material culture, and as such would have played an active and dynamic role, having both symbolic and economic value, within society (Wells 2006; Sampietro Vattuone et al. 2008; Salisbury 2012). The soils would not have been understood in terms of
the biological, geological and chemical processes that led to their formation; however people throughout prehistory accumulated knowledge about soils and agricultural practice that included the incorporation of organic and inorganic materials into the soil with the intent of improving fertility and productivity. In a society in which agriculture and fertility appear to have been at the core of beliefs, soils such as these would have also been rich with symbolism and spirituality. Ecological knowledge would have been a set of skills and practices passed from one generation to the next, through oral traditions and intimately linked to ritualised practices designed to ensure the continued fertility of the soils and the success of the harvests.

The gradiometer data from the two brochs surveyed in Evie provides little evidence for the anthropogenically enhanced soils seen at a number of the other, broadly contemporary sites within the case study areas. As such it might be tentatively posited that arable cultivation played a lesser role in the economies of these two settlements. At the Knowe of Grugar, an enhanced linear anomaly, with a parallel trend running south from the site seems to suggest a boundary feature more in keeping with the control of movement than the protection of crops, but the partial nature of the anomaly and the lack of a clear connection to the broch itself makes a more detailed interpretation impossible. At the Broch of Burgar however there is a clear connection between the enclosure and broch settlement and apparent boundaries extending out into the area surrounding the broch, and the form of the enclosure entrance – gently curving outwards would seem more in keeping with a pastoral rather than arable function (Pryor 1996).

The evidence for the control and movement of livestock at some of the broch settlements within these case-studies is perhaps not so clear as that for the enrichment of agricultural soils; however there is sufficient detail and variance to indicate both arable and pastoral activities. Whilst not providing evidence for complete agricultural specialisation this would
appear to suggest that the inhabitants of individual broch settlements may have placed differing emphasis on arable and pastoral agriculture. Such specialisation has been interpreted as part of a centrally controlled economic model (Dockrill 2002), but a particular emphasis on arable or pastoral agriculture would also have led to the development of particular skills and knowledge, as well as subtly different annual cycles of activity, and these would have formed integral elements of the identities of the individuals who lived and worked in these settlements.

6.3.2 INSIDERS AND OUTSIDERS

A key theme that emerges from the detailed investigation of the sites within the two study areas is the construction of a wide variety of boundaries. Some of these as discussed above are closely related to agricultural practices, and whilst these would certainly have influenced movement, social relationships and identity, these elements are not perhaps as explicitly presented as they are in some of the other enclosures which are used to create and structure spaces in the later prehistoric landscape.

All of the brochs surveyed provide clear evidence for complex boundaries that create a separation between the broch settlement and the surrounding landscape. The brochs of Loupandessness, Grugar, Burgar and North Howe are each positioned in fairly flat open areas, and all have substantial multivallate enclosures tightly surrounding the settlement. Midhowe and the Broch of Borwick are instead both positioned on natural promontories, which are enhanced and elaborated through the construction of ditches and ramparts, thus arguably achieving a similar result as the multivallate enclosures. These elaborate and over-sized boundaries are an explicit indication that the act of enclosing an area was about more than simply creating a space by the simplest and most efficient means possible. This can also be extended to the instances in which natural landforms are manipulated and enhanced to create
Chapter Six: Creating Spaces in Prehistory

boundaries; rather than the promontories providing an easily enclosed location, it would appear that the nature of the site played a role in its selection.

6.3.3 Natural or Cultural Spaces?

The creation of tangible spaces, through the digging of ditches, or the raising of earthen banks, can be interpreted as the imposition of human order upon the world. However it is also possible to identify a series of what might be regarded as natural features that appear to have also formed an important role in structuring the landscape.

Figure 6.22 The Brough of Bigging in a force seven westerly gale (12th March 2009)

The interplay between cultural and natural features has already been touched upon in discussion of the location of the brochs of Midhowe and Borwick on natural promontories, but a further, more dramatic example of this manipulation of natural features can be seen at the Brough of Bigging. The position of this promontory, jutting into the north Atlantic is unarguably natural, particularly during a westerly storm (Figure 6.22); however by selecting and modifying it the dichotomy between culture and nature is blurred, so that this natural landform can be considered architectural (Norberg-Schulz 1971, 37; Ingold 2000, 187). The multiple boundaries
constructed at the entrance also serve to enhance the liminality of the site, separating the promontory and thus creating a space, both natural and cultural, that is firmly positioned between land and sea.

A number of other sites appear to have been carefully situated to take advantage of particular natural features. Several of the brochs, most notably North Howe, Burgar and Borwick, are located close to burns. This could easily be interpreted solely as a pragmatic response to a need for fresh water, and they may well have provided water, but these watercourses also form barriers, albeit not insurmountable, thus providing the opportunity to control and direct movement. The location of the Peerie Hill roundhouse on a ridge and Loupandessness perhaps on a low rise extending into the loch or an area of marsh also suggest a concern with controlling movement, as well as perhaps the visibility of these sites. The Knowe of Swandro is also located in a similar position, although the underlying chambered tomb may have played a greater role in the choices of the builders of the Iron Age structures.

The construction of a settlement, or indeed any building, draws on a series of choices made by the builders, with regards to the situation of the site. Such choices might be based on practical concerns, or by drawing on cultural or cosmological models, and indeed these pragmatic spatial configurations and physical features are comparable to those described by traditional models such as *Feng Shui* (Han 2001, 77). These choices, from a modern perspective, can also be seen to represent an interaction between architectural and natural elements. Acts of construction appropriate and enhance naturally defined spaces, and through the clear establishment of an inside and an outside create tangible existential spaces. Such spaces may possess different ‘characters’ from their surroundings (Norberg-Schulz 2007, 129), with different elements variably being brought to the fore, but this fundamentally raises the
question of how we may draw a line between the architectural and the natural (Parker Pearson & Richards 1994, 2; Ingold 2000, 173).

6.4 CREATING RELATIONSHIPS

The act(s) of creating these particular spaces, whether through the construction of a boundary or the cultivation of the soil, inscribes an attachment to a locale, which is reinforced through repeated practice. These repeated acts would have also been instrumental in the tacit acquisition of the skills required to herd livestock, repair dykes and cultivate arable crops, and also the development of social relationships and identities.

6.4.1 RELATIONSHIPS BETWEEN PEOPLE

All of these landscape features represent the efforts of different individuals and groups within the later prehistoric communities over the course of multiple seasons and years. Each year dykes would have been built and repaired, seeds sown, livestock herded, crops weeded and harvested, alongside a multitude of other activities. Each of these would have brought together certain individuals from within the domestic group and on occasion from the wider community. Thus group identities would have been temporarily created and reworked, coming to the fore, or being implicitly recognised as individuals moved between different tasks and different places within the landscape. Thus the dykes and fields described above cannot represent a map of relations, rights of access and territories which can simply be read, rather they represent the conditions through which relations with others, and with the world, were generated, learned and understood (Giles 2007c, 110).

The time and space would have primarily been organised by agricultural activities – daily rhythms and seasonal cycles affecting relationships and identities. When people worked together on an activity such as the harvest, then gender- and age-groups would likely have
been brought together in one space (e.g. a field) but at other times people’s work would have been differentially situated, and this differentiation would have more clearly offered scope for the development of gender- and age-specific identities (Robin 2002, 258). Whilst several of the brochs are apparently isolated, the Midhowe/North Howe/South Howe group as well as the pair of brochs in Evie (Grugar and Burgar) both represent the potential for inter-household relationships. Ethnographic research from the Andes, where kinship of individual domestic groups is overcome by entry into broader ‘communities’ and private economic interests are submerged in a collective effort of production (Gose 1991, 44-45) demonstrates that these identities may have shifted at different scales over the course of each agricultural year.

Whilst there is good evidence for relationships between and within households and communities the elaborate architectural enhancement and enclosure of these settlements, which sit at the centre of each of these landscapes also suggests a clear desire to emphasise, define and control the transition from inside to outside (see Foster 1989; Brück 2008, 259). These spaces, rather than being inscribed through repeated practice, are structured through the use of formal delineation and division, what de Certeau refers to as ‘strategies’ by which the powerful exert power and social control (de Certeau 1984, xix; Low & Lawrence-Zuniga 2003, 31-32). In addition to social control the brochs and their associated enclosures can also be seen to create clearly defined and enclosed spaces, and therefore much of people’s daily lives would have been lived out in closely categorised and organised spaces, centred and focused upon the home, as a locus linked to the development of localised groups and identities within more fragmented communities (Barrett 1994, 147-151). Typological discussion of brochs has tended to obscure much of the variation between individual sites, but the preceding discussion of just seven Orcadian brochs provides clear evidence of the diversity of practices, interactions and relationships that people would have undertaken. Thus we can see a social structure during the Middle Iron Age in which identities and membership of
particular social groups might be somewhat seasonally fluid, but at the heart of which was a closely defined and controlled belonging to a particular household.

6.4.2 Relationships with the Past

The process of cultivating and enhancing the soils around the brochs discussed above can be seen to have an element of memory and repeated inscription, and also represents a continued commitment to place and acknowledgement of what has come before. In addition, the location of these households within the landscape, and some of the practices which their members undertook can also be seen as means by which relationships with the past were structured. Both the construction of brochs and the reuse of earlier prehistoric sites have been interpreted as attempts to legitimise the presence and location of Iron Age settlement within the landscape (Hingley 1996; Armit 1997). However the Iron Age structures built in and around the tombs at Rowiegar and Swandro are strikingly different to the substantial settlements at North Howe, Midhowe and South Howe, and it is particularly interesting given that dating evidence from South Howe and Swandro suggests the two sites were broadly contemporary. Does this then represent two different social groups legitimising their presence in the landscape in different ways, or do these sites represent practices and perhaps individuals who were segregated from the rest of society? The reuse and apparently close relationships between the Neolithic tombs and the Iron Age settlements on Rousay are clear, but throughout both study areas it is important to remember that the Iron Age landscapes resulted from the inhabitation of Bronze Age and Neolithic residues (Barrett 1999, 258). This is particularly well illustrated in the Yesnaby area, where it is possible to see instances in which earlier monuments appear to be referenced by later settlement, but the settlement at Borwick is apparently intentionally visually isolated from the Peerie Hill roundhouse. This theme will be further developed in the following chapter, but there would appear to be complex approaches
to the relationships between Iron Age activity and the traces of earlier generations in the landscape.

6.4.3 Relationships between Humans and the Environment

The preceding discussion of boundaries and soil provides considerable evidence with which to explore the relationships between people and their environment during later prehistory. The widespread evidence of anthropogenic soils from both study areas highlights the close relationships that people developed with the agricultural world. In addition these repeated cultivation practices – tilling, sowing, weeding, harvesting and so on – developed an intense familiarity and distinct ecological understanding of the landscape around each settlement, so that members of each household might share a close attachment to the farmstead (Netting 1993, 63). As discussed above, the soil becomes more than simply an economic resource, and may have been respected and revered through ritualised practices (Sampietro Vattuone et al. 2008, 197-198), whilst the agricultural cycle was at the heart of later prehistoric cosmologies, placing human existence on the same footing as grain, in order to allow people to transcend life and death and embrace permanence (Williams 2003).

Such intimate relationships with the soil, and perhaps dialogue with a ‘mother earth’ deity, alongside the tacit acquisition of ecological knowledge through everyday communal tasks, has been characterised by Pálsson (1996) as one of generalised reciprocity. Unlike modern western ideas of exploitation or paternalistic protection of the environment, which imply some degree of culture–nature dichotomy, the paradigm of Communalism (Figure 6.23) rejects the separation of nature and society (ibid). The situation of humans as a part of nature is common in many small-scale, pre-industrial societies, and within such belief systems soils are perceived as animate, inhabited or controlled by ancestors or higher unseen powers (Winiwarter & Blum 2006, 108; Wells & Mihok 2010, 323).
Figure 6.23 Paradigms of human-environmental relations (after Pálsson 1996, Fig. 4.1)

The absence of such a dichotomy in turn has implications for the ways in which tenure of the landscape was structured. The intensively cultivated nature of the agricultural plots at a number of the brochs surveyed suggests a long-lasting commitment to place, yet the apparent absence of boundaries presents a picture of a more dynamic and impermanent pattern of cultivation, which is in sharp contrast to the establishment of substantial and elaborate boundaries around contemporary settlements. Ingold (1986, 153) refers to the appropriation of land into plots by a cultivator, as two-dimensional tenure. This sees a greater investment in the land, and the development of closer ties between individuals and particular portions of land, these individuals are in turn members of increasingly tightly drawn communities which are able to sustain tenurial claims from one generation to the next (Barrett 1994, 140-149). These questions of tenure, explored in terms of access and control, rather than ownership, of resources, place agricultural production at the heart of the ways in which societies were produced and reproduced (Hill 2011, 254).
6.5 CONCLUSIONS

Ultimately, concerns over chronology and functional variability can only be tested through intrusive investigation, but the presence of the range of features beyond the broch settlements identified through non-intrusive survey work, clearly demonstrates the value of undertaking such work and has enabled the definition of a considerable number, and wide variety of spaces. These vary from the large – territories defined by substantial stone and earth dykes recorded in detail through to the small – unbounded plots of soil representing places inscribed through repeated practice over many seasons of agricultural cultivation. Each of these spaces will have been formed as a result of particular relationships and patterns of activity – the repair of dykes, the tilling of soil and many other activities would have brought people together within the community, creating distinct spaces, social relations and identities.

The later Bronze – Early Iron Age landscape is comparatively under-represented, but the evidence presented above provides evidence of spaces clearly defined by practices if not by physical demarcation. These spaces are spread across the landscape, and whilst there is little archaeological evidence for paths, the landscape is clearly one in which movement played a fundamental role in structuring. These Late Bronze Age – Early Iron Age dykes and enclosures reflect the diversity of functions, practices and identities that existed during the period. Different people would have been involved to varying degrees throughout the year in these activities, bringing them into contact with one another in a multitude of different social situations. Thus a specialist in one activity may have only been able to contribute basic manual labour at another point in time. The degree of inter-household cooperation is, of course, difficult to ascertain, however the close location of the roundhouses on the Peerie Hill and Billia Fiold perhaps hints at a more open social structure, in which at least some of the annual cycle of tasks were shared. If this is the case then individual identities would have been made
and re-made throughout the year, as were the relationships between and within the social groupings.

The landscapes of the Middle Iron Age become increasingly focused upon the broch settlements, and this increasingly monumental, formalised, architectural definition would seem to represent the use of strategies (de Certeau 1984) implying power and control, although we must be aware that rather than seeing this process in terms of the development of social power structures it is also possible that these strategies might represent an attempt to make life more predictable in response to a changing world which threatened the inhabitants ontological security (see Brück 2000, 294). Hill (2011, 251-258) suggests that the close definition of communities (and who was in and who was out) reflects a more segmentary society, with a lack of a distinct elite and an emphasis on the community, whose social forms were extremely messy, held together by fluid and changing threads of relationships, that criss-crossed households, local communities and larger networks. Thus although identities and social structures would have been fluid, at the core would have been membership of a clearly defined, in both physical and conceptual terms, broch household.

The organisation of space, and the development of agricultural environments are the result of multiple interactions between people of different ages and gender, at a variety of different scales, each of which in a small part, contributes to the reproduction of identities and of social structures, and thus helps to define their place in the world. Therefore the evidence for increasingly intensive agricultural practices into the Middle Iron Age represents a shift both in the day-to-day activities of many members of these social groups and also a change in the way in which identity was constructed and reworked. These identities were tied to both what people ‘do’ and also to a sense of place. People would have generated a sense of belonging through movement and inhabitation, these practices making and unmaking relations with
people, things, animals and places (Giles 2007c, 104-109) and it is this sense of place (genius loci) and of inhabiting the landscape which will form the focus for the following chapter.
Chapter Seven: A Dwelling Perspective

The previous two chapters have explored in detail the archaeological remains present in the two study areas, considering both the distribution and relationships between sites, and also the ways in which natural and artificial boundaries have been used to define and maintain spaces within the landscape at a variety of scales. But people do not simply exist in these spaces; Heidegger’s concept of dwelling implies a meaningful engagement with the environment, and thus spaces where life occurs are places – a space which has a distinct character (Norberg-Schulz 1980, 5). This chapter aims to explore the ‘spirit of place’ or genius loci of some of the places identified within the case study areas. I am not trying to argue that the perception and experiences of myself and those others who contributed to the records utilised in this chapter form a proxy for the inhabitants of the areas in the past. However by presenting the experiences of myself and several others, I hope to more explicitly consider the nature and character of the various different places discussed in this chapter.

In addition to considering questions of the experience and character of these places within the landscape this chapter also provides an opportunity to address the ways in which archaeologists present these elements of their research. By far the most limiting, and indeed disappointing element of Tilley’s phenomenological research has been the use of imagery (see Ingold 2005a, 126), and the problems of presenting embodied landscapes and the messy complexity of human activities and relationships have been discussed by an increasing number of archaeologists (e.g. Bender & Edmonds 1999; Shanks 2004). The phenomenological recording provides a range of data, both in terms of media and source, with which to consider the character of these places and some of these are presented, in typical archaeological fashion, as ‘inked-up’ publication versions of field records. However this chapter also provides an opportunity to explore the character of a space and how it works within the human world.
As such, rather than solely relying on objective, realistic representations, I have aimed to produce images that are more open to interpretation, and challenge the audience to more actively engage, in the hope of producing representations that are evocative of the experience of a place, or indeed of particular act(s) such as movement.

**7.1 A NOTE ON PRESENTATION**

At the risk of influencing the audience’s own perception of some of the images that form a key element of this chapter, it is perhaps worth briefly summarising the processes by which they have been produced.

Norberg-Schulz (1980, 16) makes the connection between the structure of language and the analysis of place, suggesting that space as a system of relations is denoted by *prepositions* to denote topological relationships, whilst character is denoted by *adjectives*. Following this the word cloud images (e.g. Figure 7.12) were created by collating the descriptive modifiers (e.g. adjectives and adverbs) from the respective journal records (appendix 3 & 4), the resulting list of words was then processed using Wordle (an online word-cloud generator), to create word-clouds which give greater prominence to words that appear more frequently in the source material. Adobe Photoshop was then used to merge the resulting cloud with an image of the area being described.

Movement is fundamental to human experience, therefore in presenting maps of the journeys undertaken in the landscape it was important to try to convey not only the spatial relationships between places but also a sense of movement and the experience of moving through the world. The paths between and within places can be considered as the connectors between the nodes of a network. Without connections a map or plan of these nodes (places) would simply be hollow elements in undifferentiated space, but rather than simply conveying
the connection between entities these connections can contain other layers of quantitative and qualitative information about the nature of the connection (Lima 2011, 88-90). Initial attempts to produce these maps, following Norberg-Schulz’s textual distinctions, used only the prepositions from each journal record. However terms such as ‘over’ or ‘beyond’ require something to be positioned relative to, and also failed to convey the sense of being in the world. Instead the maps of the journeys (e.g. Figure 7.6) were produced by drawing descriptive elements from the respective journal records which were then written along the path of the walk, which had been previously downloaded from the GPS. This text was then overlain onto the Ordnance Survey map of the area using AutoCAD, so that the description was correctly located within the world.

Note that the different contributors to the phenomenological recording undertaken within the study areas are identified by their initials, however no reference will be made to age, gender, occupation etc. as it is not my desire to explore the perceptions of landscape and movement by particular genders or age groups, but rather to acknowledge the existence of individual experience and alternative narratives.

7.2 YESNABY – SKAILL

7.2.1 A LATE BRONZE – EARLY IRON AGE LANDSCAPE

In the previous two chapters I have demonstrated the presence of a considerable range of archaeological remains, likely Late Bronze-Early Iron Age in date, in the upland area on the southern edge of the Yesnaby-Skaill study area (Figure 7.1). Although subsequent cultivation practices and natural erosion have resulted in gaps, I would suggest that this represents a comparatively complete and extensive landscape covering an area of more than 150 hectares. Within this area there is evidence for a wide range of spaces and practices, which suggests that
Chapter Seven: A Dwelling Perspective

activities during this period were spatially arranged in a loose, but still clearly structured manner. Although the spatial relationships between these different sites within the landscape has been touched on already, what becomes clear from the extensive distribution of these features is that movement must have played an important role in the day-to-day lives of the people who lived in this environment, and thus how they perceived and understood their immediate world.

Barrett has convincingly argued for life being centred upon the home during the later prehistoric period (Barrett 1994), so it would seem reasonable to assume that the roundhouses on the Peerie Hill and on Billia Fiold would each have represented a separate, slightly different focus of life, for two different groups. The upland location and soil mean that this hilltop is, by modern Orkney standards, marginal, however when viewed from the roundhouse there is a feeling that it sits at the centre of this landscape. The Peerie Hill roundhouse is situated on the highest point of the hill, and although the nearby slopes of Cringla Fiold and Staney Hill obscure the views to the south, to the north, east and west this elevated position provides panoramic views, and thus would have been highly visible within the landscape (Figure 7.2). These views are dominated by distant vistas, such as the Harray hills approximately 13km away to the northeast, and whilst the nearby hilltops such as Billia Fiold are visible much of the lower lying land closer to the site is obscured.
Figure 7.1 The Late Bronze – Early Iron Age landscape on the southern edge of Yesnaby.
Adjacent to both roundhouses are small enclosures which are located on fairly flat areas. Any traces of the prehistoric soils have been eroded away and in many places the bedrock is exposed, but given the size and form of these enclosures it seems likely that they would have been cultivated rather used to contain livestock. This would suggest then that movement related to these enclosures would have taken two forms – movement within the enclosures as part of agricultural practices, and movement along and between the enclosures. The former
would have been structured by the tasks and the nature of the crop; tilling the soil, sowing seed, weeding and harvesting would all have involved moving amongst and between the plants. The latter would I suggest have taken the form of more careful movement along these dykes. Whilst I tended to walk along the edges of these ‘fields’, I observed the movement of other people who were assisting me with the fieldwork. There was a tendency, particularly amongst those individuals who were less familiar with the hill and the enclosures, to walk straight along the hill, right through the middle of the space created by the enclosure. It is perhaps a product of my childhood in the countryside, or a result of a far greater familiarity with the hill, but it was difficult not to think that such movement was somehow wrong. I was still conceiving of the space created by the enclosures as fields, whilst to ignore the role of the boundary and walk straight through the middle was effectively ignoring the creation and existence of such a space. Both positions clearly have inherent dangers; my interpretation of the enclosure as a field is entwined with the way in which I move around it, perhaps limiting my ability to explore other routes of movement and potential interpretations. Conversely to ignore the potential influence that the dyke might have upon movement is to interpret the space as a heathery hilltop, ignoring the prehistoric spaces entirely.

Movement in the hills above the settlement and enclosures is much harder, both as a product of slopes and also the ground cover. In contrast to the straight-legged striding gait common in modern western societies, walking from the knees minimising movement at the hips as is traditional in Japan, is very effective on rough or hilly terrain (Ingold 2004, 325). Thus it is worth considering how people move within these landscapes, both in terms of the individual,
sensuous encounter with the environment, mediated through the body, and also the routes that they created and followed within what initially appears to be a ‘wild’ area.

Figure 7.3 Journey 001 (GJL 9th October 2008) from the Cringla Field cairn to the Langadee burnt mounds, via the Peerie Hill roundhouse.

The natural forms of these slopes tend to funnel and direct movement and the paths which this leads one to follow can be regarded as the easiest, if not often the most direct. The linear dykes intentionally running perpendicularly to the contours stand in sharp contrast to this, but we must also consider the livestock which likely represent a key reason for the use and structuring of space in these upland areas during later prehistory. The herders would have organised and experienced their daily and annual lives around the requirements of their livestock, in particular going around in the hill, checking on their health and moving them to
new areas of grazing, would have been structured in relation to the topography and to the movement of the animals (Gray 1999, 446-447).

These ideas of the movement of livestock, the sheep tracks, and the sense of movement that comes from following the natural forms of the hills all seems at odds with the sense of space created by the cross-contour dykes. The dykes are features which are imposed upon the landscape, and seemingly bear little relation to the practicalities of movement and I would suggest that instead they fulfilled an important role in the structuring of the upland landscape. Much of the herding activity which these features seem to have been related to would have been undertaken either as a solitary task, or perhaps by larger groups on a seasonal basis, therefore whilst a few individuals may have felt a clear sense of belonging stemming from repeated experience and environmental knowledge, for most of the population these upland areas would not have been places which were well-known and familiar. The cross-contour dykes perhaps represent then both a manifestation of an underlying cosmological order, and also a means of conceptually (and physically) linking the ‘dangerous-unfamiliar’ upland with the ‘safe-known’ downslope areas.

In contrast to the roundhouses, the sense of place amongst the group of burnt mounds at Langadée, could be considered to be inverted. The mounds sit low down, in a somewhat boggy area, surrounded and visually isolated from much of the surrounding landscape. This group of monuments are also in a sense marginal, or at least away from the settlement and agricultural
activity, and outside of the enclosure that encompasses the Peerie Hill. This sense of a different place is further enhanced by the presence of the burn, and although now partially canalised the traces of relict stream beds suggests the water would have curved around and between the four mounds (Figure 7.4). It is possible to identify practical reasons for the situation of the mounds beside the burn and downstream of the settlement, but the flowing water itself is rich with metaphor in terms of movement and progression, and perhaps more significantly with notions of purity (Richards 1996, 316), and these can by closely related to the transformative and potentially polluting nature of practices such as wool processing, cooking and bathing that have been posited as the function of burnt mounds (Barfield & Hodder 1987; ó’Drisceoil 1988; Anthony 2003).

Figure 7.4 Looking south-east towards one of the burnt mounds (beside figure in blue) From the location of a second mound, the burn of Langadee is visible in the foreground.

It is also by following this burn downslope and downstream, that one is able to easily approach the Brough of Bigging and the important geo that provides access to the sea. As noted in the previous chapter, the multiple boundaries constructed at the entrance to the promontory serve to create a clear liminality; a space positioned between the land and the sea which seems to have been reserved for funerary activity. The multiple ramparts create a depth of
barrier which would have had to have been negotiated, and the natural form of the coastline extends this sense of movement and negotiation out beyond the promontory itself. Approaching the site from the north or east, the top of the promontory is clearly visible whilst the entranceway and much of the surrounding sea are hidden from view. It seems to be a simple matter of heading towards the summit, but almost inevitably such routes result in being brought up short by cliffs and sea, leaving me to follow the coastline around to the entrance (Figure 7.5).

Figure 7.5 Approaching the Brough of Bigging from the northeast.
However when walking from the southeast the natural topography draws both the feet and the eye downhill towards the promontory. The approach is uncomplicated, with a clear view of the entrance, ramparts and the interior of the site, and even though the final walk up to the summit of the promontory requires a dogleg to the left, this seems to flow and follow on naturally, up and around (Figure 7.6) with only the cultural elements of the ramparts requiring pause and negotiation, in contrast to some of the disjuncture of walking along the coast. By approaching from the southeast the setting of the promontory fort is also highlighted. Whether viewed from the Peerie Hill roundhouse, or the gentle slopes below the Langadee burnt mounds, the Brough of Bigging is clearly visible against the sea and sky beyond (compare
this sense to the more constricted views from the northeast shown in Figure 7.5) and even when low cloud or mist reduces visibility, there is still a clear visual sense that the promontory is at the edge of the land. This is reinforced and heightened from the promontory itself where the views on the seaward side extend from the Old Man of Hoy nearly 16km to the south to Marwick Head approximately 10km to the north. The sea and sky visually dominate, but particularly in windy weather, smell, taste, touch and hearing are also assaulted, and in doing so further enhances a genius loci which draws on a sense of liminality and exposure.

The various sites associated with the Peerie Hill settlement create an extensive landscape of interconnected places. In some cases this linkage is visually structured with certain locations being highly visible within the landscape, particularly from longer distances. Other places, such as the burnt mounds are less visible within the landscape but would have no doubt been connected by well-trodden paths, and although these are archaeologically invisible, the natural landforms can perhaps give a sense of the flow and rhythms of movement. I would also suggest that in the positioning of these sites people were concerned with the nature and experience of moving between places and within this landscape. Some elements of the landscape sit in sharp contrast to this sense of natural form and movement and present a tension in the way in which this Late Bronze-Early Iron Age world was structured. Places are imposed upon the landscape, but also structured by it and for the inhabitants of this landscape cosmological referents and metaphors would have implicitly sat alongside practical concerns of movement and day-to-day activities. The roundhouse(s) provide a focus for domestic activity and a sense of belonging and familiarity, but beyond there is an underlying sense of movement and interconnectedness, between a series of places, each with their own distinct purpose and
genius loci. In moving around and dwelling within the landscape people would have been reworking relationships and associations, both to places and to other people, with different elements of identity and relationships shifting to the fore, depending upon the task, those involved and the time of year.

7.2.2 BORWICK

Standing at the entrance to the broch, it is striking and perhaps a little surprising that I cannot see very far. Directly in front of the settlement is a comparatively level area of pasture but the land slopes upwards towards the ridge to the north and east which is little more than half a mile away, and to the south the steep slope of the Hill of Borwick is even closer. This landform creates a small visually bounded bowl, with the broch settlement sitting at the lowest point (Figure 7.7). The only feature visible which is any distance away is the hill of Cringla Field, on top of which the mound of the possible Neolithic tomb (YES010) is just visible. Although the clifftop location means that the broch dominates the geo and beach immediately below, it is noticeable how minimal the presence of the sea is. Despite being within a few metres of the cliff top, only small slivers of water are visible in the geos to either side, and even in a westerly storm the solid bulk of the broch shields the settlement from the ocean.

Moving around the wider area, it becomes clear that such a distinct impression of the landform is only gained from this position, suggesting that the builders intentionally positioned their dwelling and the associated areas of activity and agricultural practice with this effect in mind. Further from the broch the degree of bounding one feels varies, as does the visibility of...
the sea. To the south of the broch the cliffs and the hill of Borwick are more elevated and exposed and together with the expanse of the sea seem to shift the emphasis to more distant panoramas and a greater sense of open-ness, and when looking back towards the broch the settlement quickly blends with the orangey-grey rock of the cliffs, and is then blocked from view by the hill itself (see Figure 7.8).

Figure 7.7 Circular view for the Broch of Borwick (27th November 2008 2:30pm; slightly overcast; drawn from immediately outside the roundhouse entrance)
Perhaps the most significant feature immediately to the south of the broch is the Noust of Borwick (Figure 7.9), a substantial but sheltered inlet which faces onto the Atlantic, and is reached by a short and gentle downhill walk along the clifftop from the broch. Although the issue of coastal change must be considered, this inlet provides access to the sea, and the shape of both the surrounding cliffs and the storm beach would provide shelter and space to pull up boats well above the high-tide line. Unlike at the broch itself here the sea is a very immediate presence, and the focus and orientation shifts from land to sea. This is hardly surprising, but does illustrate well the rapid variation in the character of different parts of the landscape as
one moves around. Views shift, the grain of the landscape alters and at the more immediate embodied scale changes in the texture and nature of the surfaces underfoot impact the gait through which the world is experienced.

![Figure 7.9 Looking northwest across the Noust of Borwick at low tide](image)

It is also worth considering the nature of the sea itself. The west coast of Orkney is the most exposed, taking the full force of Atlantic storms and the marine contours slope rapidly downward so that water depths even close to shore are significantly deeper than the modest levels within the archipelago (Hall & Brown 2012). Also unlike much of the Orcadian coastline it does not look out towards other landmasses, the tiny islands of Sule Skerry and Rona lie approximately 60 and 140km respectively to the west, but these are beyond the limit of human visibility and bear no evidence of prehistoric occupation. The character of this body of water is distinct and dramatically different to much of the archipelago, in terms of the resources available, the nature of the water itself, and the potential dangers faced by sailors. In addition it does not provide the same sense of immediate connection as other coastal areas such as Eynhallow Sound or Scapa Flow in which the marine and terrestrial are more closely
linked (compare Figure 7.9 with Figure 7.26 below) and presumably travel on this west coast would have been primarily along the coastline, rather than perpendicularly away from the land.

In contrast to the focus upon the sea to the south, the ground to the north of the broch slopes gently upwards and there is a sharp contrast between the area immediately back from the cliff edge, which has been stripped of soil by the strong winds to expose the shattered orangey bedrock, and the grassy slopes inland. Some 400m north of the broch is the massive earthen bulk of the Stinkna Geo dyke, which runs inland from the coast. As noted in the previous chapter this earthwork appears to have formed an important element of the broch landscape. Although there is no absolute dating evidence, such an interpretation is further strengthened when considering the visual relationship between the two monuments. When viewed from the edge of the broch settlement it becomes clear that where the dyke still survives to a substantial degree, it forms a false crest that blocks much of the view to the north (see Figure 7.10) and assuming it maintained a similar form further to the east where it is now heavily plough truncated, then this phenomenon would have continued up the hill (see Figure 7.11). The heavy cultivation of these fields around the modern farms of Borwick and South Seatter has removed any evidence of a further continuation of this dyke, but the surviving elements do give a sense of the enclosure formed by the dyke.
Figure 7.10 Panorama looking north from the Broch of Borwick

Figure 7.11 View north from the Broch of Borwick modelled using ArcScene. The dyke is shown in pale orange and three cairns (red) are just visible on the hilltops beyond the dyke.
The dyke creates a clear edge to the area. At the centre of this territory is the broch settlement, immediately associated with the broch is the key symbolic and economic resource of the anthropogenically enhanced soils, and beyond this an area of open and fairly flat land within which a handful of other sites which might be tentatively associated with the broch. Outwith this boundary is an area which can be broadly characterised as ‘upland’ and contains several groups of burial cairns, likely Bronze Age in date.

![Figure 7.12 Word cloud representation of the territory around the Broch of Borwick (from Journey 006 – JMM 14th May 2009)](image)

Whilst this area of upland would undoubtedly have been exploited, perhaps for wild resources and also potentially for summer grazing of livestock, I would suggest that the Stinkna Geo dyke represents the edge of the day-to-day territory of the inhabitants of the Broch of Borwick. This would have been the focus for the vast majority of activities undertaken by these people, and thus these people would have spent a considerable amount of time working and moving around a physically and visually defined area. When inhabiting this space they would have
been almost constantly in sight of the broch, never much more than 0.5km away from the settlement, and I would suggest that there is a clear sense that the broch is at the heart of this space. These everyday experiences would have been directly related to the way in which people viewed and defined their ‘local place’ (Fitzjohn 2007, 40) and thus the Stinkna Geo dyke represents a formalisation of this place. As a focus for a considerable proportion of day-to-day activity, the people who would have lived and worked in this small area would have developed a considerable degree of familiarity and attachment with the place, what Relph (1976) defines as insideness. The more profoundly inside a place a person feels then the stronger their sense of identity with that place will be (Seamon & Sowers 2008, 45), and I would suggest that at Borwick this insideness comes both from the combination of topography, physical enclosure and from the strong sense of containment and security that develops as a result of the repeated experience and familiarity with the space (Figure 7.12).

7.2.3 BAY OF SKAILL

“Very exposed and with a view directly out to the Atlantic. Constant sound of waves crashing on the beach.” (JMM 18th November 2011)

The Bay of Skaill is a complex multi-period landscape with considerable evidence for settlement throughout the prehistoric period. Much of the area is an extremely dynamic and mobile landscape of sand dunes and machair, and together with continued reuse of the landscape, including modern agricultural practices, much of the archaeological material has been either damaged or obscured. The gradiometer data suggests that there is a considerable focus of later prehistoric domestic activity, with the broch of Loupandessness on the shore of the loch and several groups of roundhouses which might tentatively be identified as broadly
contemporary. This then represents a landscape and settlement pattern which is strikingly different to that described at the Broch of Borwick.

Figure 7.13 Looking north across the Bay of Skaill. Loupandessness broch is marked as an ellipse, whilst the locations of the three probable settlement sites in the vicinity are highlighted. The Knowe of Verron is also marked on the far left of the picture.

Like Borwick the Bay of Skaill faces out onto the North Atlantic, taking the full brunt of storms and westerly gales but also providing one of the few good landing places from which it is possible to access the interior of the west mainland of Orkney from the sea (Gibbon 2006, 220-221). However unlike Borwick the broch at Loupandessness is not located so as to dominate the marine landing, instead the settlement is approximately 500m from the coast (Figure 7.13). The dunes and machair to the northwest shelter the site somewhat as well as blocking vision, although on a stormy day spray thrown up from the headlands is visible and the sound of waves is a constant presence. The presence of the loch is much more strongly felt, drawing the eye inland, along the water to the hill of Linga Fiold to the southeast (Figure 7.14). This forms an axis that may have both a cosmological element and also suggests links with the wider landscape and the interior of the island. Moving on and around the Loupandessness mound, the area of fertile machair to the northeast, the loch to the southeast, as well as the hill-land are all visible, and sounds of waves and the salt-tang remind one of the presence of the sea,
even though it is obscured from view. This creates both a sense of centrality, but also liminality. From the settlement it is possible to observe a wide range of different environments and resources, yet at the same time I am conscious of being on the edge of all of these spaces, whilst the actual area of level, relatively well drained and stable land which is sheltered from the worst of the Atlantic storms is comparatively small. Although there is no evidence for physical boundaries to this ‘territory’ I would suggest that the hills (particularly if as seems likely they were moorland during later prehistory), loch and machair create a sense of bounding, and that the vast majority of day-to-day practices undertaken by the broch dwellers would have occurred in this space in close proximity to the settlement.

Figure 7.14 Circular view for Loupandessness (1st December 2011 11:00am; clear, Force 7-8 westerly wind; drawn from the top of the broch mound)
The other known Iron Age site in the area, the Knowe of Verron, is situated on a headland on the north side of bay, approximately 1.5km away. The modern views between the two sites are blocked by the dunes and are further obscured by the buildings at Skaill House and the Skara Brae visitor centre (Figure 7.15), however even taking into consideration the dynamic nature of the dunes as well as an extant broch which would have been several metres high, the two sites and the activities of those people living and working there would have barely been inter-visible. The nature of the geophysical data (see Chapter 6) is such that the other roundhouses located in the fields around Loupandessness broch cannot be definitively dated, nor can we be certain of the degree of contemporaneity between the individual roundhouses, or between these groups and the broch itself. Even assuming only a minimal chronological overlap, all these sites are located in close proximity to one another, and thus share the same liminal but central position within the landscape. The inhabitants of the roundhouses and the broch would have shared similar experiences of the landscape, with much of the day-to-day
activity taking place within a small ‘stable’ area defined and constrained by the more dynamic environments of sand, hill and water.

In contrast to the Broch of Borwick this is a landscape which is much more heavily settled, with a range of different settlements, in terms of both size and apparent complexity, located within and beyond the study area. I would suggest that both sites share a similar sense of containment, drawing on the natural topography but also derived from the specific location in which the builders of the Loupandessness broch decided to position their dwelling. By building the broch at the edge of multiple different landscape settings – machair, hill, loch, cultivable land and marsh – the inhabitants would have been able to readily access these areas and the resources they contained, but would also have been able to exercise a degree of cosmological control over these environments from a central domestic setting.

7.3 EYNHALLOW SOUND

Unlike the Yesnaby-Skaill study area which encompasses several distinct areas and extends in different ways to connect with other parts of the Orcadian landscape, the Eynhallow Sound study area is clearly part of a single larger entity, that of Eynhallow Sound itself (Figure 7.17). As noted in Chapter 6 those areas around the Peerie and Muckle Waters on Rousay and the Burn of Ennisgeo in Evie, have separate foci and characters, and although they are on some level a part of the landscape of Eynhallow Sound, I would suggest they would not have formed part of the day-to-day landscapes of the inhabitants of the brochs on both sides of the sound.
7.3.1 The Grain of the Landscape

Eynhallow Sound represents a distinct landscape, the natural landforms creating a clear sense of ‘grain’ within the space which would have influenced both movement and vision, as well as the practices and experiences of those people who lived and worked in the landscape during the Iron Age. Henrietta Moore’s seminal ethnographic study of the Endo explored the ways in the distinctive topography created a ‘sloping world’ which powerfully affected the sense of place of the people of the valley (Moore 1996, 29), and the steep topography of Eynhallow Sound may imply a similarly sloped world in the Iron Age as well (Enlander 2008). This certainly appears to be the case during the Bronze Age in Orkney where a sacred vertical axis has been identified within the cosmological model in Orkney (Downes 2009; Downes & Thomas 2013).

But in the Iron Age I would suggest that the position of the different elements in the landscape implies a greater emphasis was being placed upon a daily axis of along. The Endo world is structured into three zones – the valley floor is the focus of economic activities, the escarpment above is the residential area, and the highland area provides timber and game (Moore 1996, 29). Three distinct topographic zones are also identifiable in Eynhallow Sound (see Chapter 6) – upland, lowland, and sea – however here the lowland area provides a much stronger focus for activity. Settlement and agricultural land, both in the past and today, are concentrated on the comparatively narrow coastal strips of Rousay and Evie. Thus most day-to-day activity, most notably domestic settlement and the tending of crops would have been focused around the brochs themselves. Movement and communication between brochs would also have been to-and-from the individual settlements. In contrast the sea and the upland...
areas may have been less visited – perhaps only for particular tasks such as seasonal pasturing of livestock, or the collection of ‘wild’ resources such as heather, peat and fish. This also likely played an important role in longer distance travel, and again one imagines that these trips, even the relatively short distance across Eynhallow Sound, would have been for specific purposes and thus outside of the day-to-day norms.

![Climbing up the hill from the Bay of Swandro.](image)

Figure 7.16 Climbing up the hill from the Bay of Swandro.

This predominant axis does not of course mean that movement up and down and within the hill was impossible, but rather that the nature of movement along rather than up-down is fundamentally different, both because of the topography and the groundcover. As an example the segment of a phenomenological walk on Rousay from the shore to the modern road (Figure 7.16) approximately half a kilometre in distance and rising around 75m, took a little under fifteen minutes (including pausing to catch our breath half way up!), significantly slower than a typical walking speed of around 1.5 m/s (Levine & Norenzayan 1999).
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Figure 7.17 Panorama along Eynhallow Sound from the island of Eynhallow. (looking southeast) The hills of Rousay (left) and Evie (right) form a clear visual boundary and highlight the northwest – southeast grain of the landscape. The island faintly visible on the horizon in the centre of the image is Gairsay approximately 10km to the southeast. Key sites within the study area are highlighted, but at least six further brochs, including Gurness, are found further to the southeast along Eynhallow Sound.
As well as a different experience of movement, topography and fauna, the absence of dykes and archaeological features extending up from the coastal plain also suggests that these upland areas lacked the physical structuring that seems to have been associated with the late Bronze-Early Iron Age settlement such as the Peerie Hill. Any structuring of this upland area would then, I suggest, have been primarily conceptual, based upon the movement in these areas in which people would presumably have grazed animals, collected wild resources, and encountered earlier monuments. Thus although these upland landscapes may not have been physically modified to any great extent during the Middle Iron Age, individuals would have developed a knowledge and memory of this upland space – recognising particular topographic features, attaching meaning to locations based on particular characteristics, the presence of certain plants or particular events such as the death of an animal and thus create places within an area of apparently undifferentiated hill-land.

“*The more time I spend in the hill the more subtleties I spot; differences in ground cover, the depth and types of soils, drainage...a diverse range of different ‘natural’ places and spaces.*” (JMM 27th January 2012)

During the Iron Age I would suggest that the primary focus was upon a horizontal day-to-day environment. This setting has an underlying northwest-southeast orientation, manifested both in terms of movement and activity, and also within the visual bounding of the area (see Figure 7.17). This horizontal alignment is punctuated by a series of architectural elements, namely the brochs which line both sides of Eynhallow Sound, and it is these structures, with multiple storeys and in some cases subterranean elements, which instead emphasise the vertical. This is an area rich with cosmological metaphor and referent and may have provided an auspicious situation for settlement and activity. If this is the case then there is perhaps a connection between this cosmologically favourable setting and the high concentration of broch settlements along the shores of Eynhallow Sound.
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7.3.2 Westness

As noted above the study area, and in turn Westness are both elements in the larger overall place that is Eynhallow Sound. Superficially Westness does not appear to have the same well-defined sense of enclosure described at Borwick, and the links with the wider landscape are more explicit, however I would suggest that a distinct sense of place is recognisable.

The three representations of the Westness area presented below (Figure 7.18) provide some insight into the ways in which the area is perceived and experienced. All three accounts are primarily focused on the visual elements of the landscape and on the experience of the space. They note the flatness of the area, and to varying extents a degree of containment and perhaps shelter. The third representation (RH) focuses more heavily on a sense of being out in the open, as expressed through the use of words such as exposed, clear and visible. As this third account was recorded by someone less familiar with the landscape of Westness, whilst the other accounts (JM & PE) were recorded by individuals who have worked in the area, it is reasonable to see a link between a sense of landscape intimacy and familiarity with the space. Strikingly two different experiences of the shore are conveyed, the use of salty, crashing and lapping, in the first account (JM), all relate to the sounds and smell of the sea, whilst the second representation (PE) uses sandy, stony and slippery to express the materiality of the shore itself. This begins to illustrate the subtle differences and fundamentally subjective nature of individual experiences of a landscape, or at least elements within it, whilst at the same time conveying a broad genius loci of Westness.
Figure 7.18 Three representations of Westness based on the same journey from North Howe to the Knowe of Swandro (Top: JM, Middle: PE, Bottom: RH)
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In turn of course, just as Westness is part of the overall place that is Eynhallow Sound, so there are further series of spaces which form elements of the place that is Westness. In addition to the obvious architectural spaces of each of the Iron Age structures, there are, as noted in the previous chapter, two distinct, but broadly contemporary locales. At the northwestern end of the coastal area, the three brochs, North Howe, Midhowe and South Howe are closely positioned, providing evidence for considerable domestic activity and agricultural intensification. Whilst to the south the Iron Age structures at the Knowe of Swandro and the Knowe of Rowiegar are much less substantial and provide little evidence for agricultural production, and perhaps most significantly both reuse and rework Neolithic tombs.

Looking northeast from Swandro and Rowiegar, the three brochs are, even on a misty and overcast day, clearly visible (Figure 7.19) and could only have been more obvious when standing to their original height, roofed and with activity going on around them. The two reused tombs are located on the promontory and this brings the sea to the fore, and creates a more open sense of place. The location of the two sites also separates them slightly from the cultivated fields inland, located as they are on a narrow ridge and separated from the inland areas by a low-lying, water logged area (see Figure 6.21). Perhaps the most significant contribution to the sense of place comes from the very nature of the archaeological remains themselves. The Iron Age architectural elements are visually unimposing but the reuse of the Neolithic tombs suggests a linkage with the past and the ancestors, whilst the apparent absence of agricultural practice further heightens the sense that these places may not be simply ‘domestic’. 
Figure 7.19 Comparative views of Westness. Top: Looking southeast from North Howe – the locations of Rowiegar and Swandro are marked in red. Bottom: Looking northwest from the Knowe of Rowiegar – the three brochs are highlighted.

In contrast looking southeast from the brochs, the headland on which the Knowe of Rowiegar is located is visible only as a thin spit of land extending out into Eynhallow Sound (Figure 7.19 & Figure 7.20). The remnants of the tombs and their later reuse are considerably smaller and low-lying, and during the Iron Age would have been less substantial and therefore less visible in the landscape than the brochs. The nature of the architecture and the presence of the three brochs also affects the sense of place, creating a greater sense of permanence, which is further
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elevated by the knowledge of the areas of deep, anthropogenically enhanced soils in the immediate vicinity. As with Rowiegar and Swandro there is variation in the experience of this space depending on where one stands amongst the brochs; but there remains a consistent and underlying sense of the place which is closely tied to the brochs, and shares the same ‘edges’ – Ward Hill, the coast, the island of Eynhallow and the Evie hills beyond (compare Figure 7.20 and Figure 7.21).

Figure 7.20 Circular view for North Howe (3rd February 2012 2:00pm; sunny but chilly and light breeze; drawn from the south eastern edge of the mound)
Regardless of whether all three brochs were entirely contemporary, I would suggest that in moving and working in and around this place in the landscape the Iron Age inhabitants would have developed a strong familiarity with the topography, as well as connections to the structures in which they lived and the fields that they cultivated. Such a repeated and day-to-day experience would develop and instil a strong sense of place, and of belonging, both to the brochs and to the wider Westness area, with perhaps a slightly lesser degree of connection to the Swandro/Rowiegar area.

Figure 7.21 Circular view for Midhowe (23rd March 2012 4:20pm; sunny, steady westerly breeze; drawn from immediately outside the roundhouse entrance)
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The brochs and the reused tombs represent two places, located at opposite ends of a larger Westness place, each with a distinct if subtly different *genius loci*. I am not suggesting that these different places within the landscape would have been explicitly defined as separate territories or that movement between them would have been carefully controlled through physical boundaries. Rather that this provides an insight into the multiple layering of space and place within the landscape. These places would have been negotiated and reworked as people moved around the Westness area with different places, at various scales coming to the fore or receding as people’s focus and activities changed.

Figure 7.22 Journey 001 (JMM 3rd May 2012) from North Howe to Knowe of Rowiegar
These places were also connected with the wider world beyond Westness, both within Rousay itself and also the other islands. Many of these links would have involved physical movement and marine travel however it is also possible to detect hints of these links through the
relationships between natural and architectural elements within the landscape of Eynhallow Sound. A particularly clear example of this can be seen at Midhowe broch where the extant nature of the former broch illustrates the tangible separation between inside and outside (Foster 1989). The one break in this bounding is the entrance passage – which unlike the common trend in British Iron Age roundhouses of an east/south-east alignment, is aligned almost exactly due west, on the headland of Costa Head in Evie (Figure 7.23). Given the way in which the distant coastline is framed by the roundhouse doorway I would suggest that there was a strong significance that prompted this unusual alignment. It is worth noting that this westerly alignment would correspond to the sunset around the spring and autumn equinoxes and Costa Head also defines the entrance to Eynhallow Sound, as well as being the northern ‘corner’ of mainland Orkney. I would suggest it could have formed a significant seamark, indeed Costa Head is one of the points used to define the edge of the North Sea (IHO 1953, 7), and therefore it may have held a particular significance to the inhabitants of the broch.

7.3.3 BURGAR AND GRUGAR

The two brochs within the Evie element of the study area share some similarities in their location and experience of their surroundings as those discussed above at Westness. Although the Evie coastline feels initially fairly open, it becomes clear when moving around and between the roundhouses that very little of the hill-land is visible, and when looking along Eynhallow sound that visually the land is comparatively constricted with the sea being a much more dominant element.
Although the Evie hills are somewhat lower than Ward Hill on Rousay, it is the differences in form and particularly the steepness of the latter, which creates the differing degrees of enclosure. The most significant visual bounding at both Grugar and Burgar comes within the middle visual distance (see Figure 7.24 & Figure 7.25), which relate to a break in the slope approximately 400m inland of the two brochs. So whilst each broch is visually quite tightly constrained with comparatively little view of the hill land, there is not the same dominating sense of enclosure provided by the hills as there is in Rousay. Although more subtle, the brochs
are still positioned at low points within the landscape so that low rises and breaks in slope limit the visibility of the surrounding area. This creates a similar sense of enclosure as seen at many of the other brochs within the two study areas, which I would suggest helps to enhance the sense of insideness that can be associated with these particular places.

Figure 7.25 Circular view for Knowe of Grugar (21st August 2012 5:30pm; sea haar (fog), light easterly breeze; drawn from immediately south of the broch and extramural settlement)

The sea dominates the senses, and is easily accessible at least in terms of moving down to the shore, from where it would be possible to collect resources and fish for smaller fish, such as young saithe and pollack (Ceron-Carrasco 1998, 75-77). Several comparatively recent boat
nousts recorded during the walkover suggest that the sea itself is also directly accessible. Each of these are located to take advantage of one of the small geos – little more than gaps in the rock shelf – that are scattered along the coastline, and although two millennia of marine action has no doubt changed the exact form, these breaks in the rock shelf (Figure 7.26) generally within 200m of the brochs would have provided a few limited places where it would have been possible for the Iron Age inhabitants of the brochs to launch and land boats.

"Walking on the rock shelf is fairly straightforward...seaweed affects walking more, very slippery and difficult to judge its depth and what is underneath...a lot of weaving around, stepping up and down and finding the best path. Not easy going...good to have my hands free."

(JMM 10th February 2011)

The sea also opens up wider networks of communication and these are particularly clear from all of the Eynhallow Sound brochs because of the central and linking nature of the waterway. Rousay provides an important link between mainland Orkney and the islands to the north and a knowledge of tidal streams in the area could have speeded the movement of sea vessels. Indeed a knowledge of the ebb, flood and slack tides would have been vital in navigating these potentially dangerous waterways (Noble 2006, 109-110). From the brochs, and from Eynhallow Sound it is possible to identify a number of distinct features, known as ‘seamarks’, which would be crucial in understanding the layout and relative positions of the islands of the archipelago. The recognition of features such as Noup Head on Westray, approximately 22km away (see Figure 7.24) would have been vital in the construction of mental maps of the coastal landscape of Orkney. Such narrative maps could have been verbally passed on to other seafarers (Chapman & Chapman 2005, 48) and together with an understanding of tides, weather and sea routes developed through personal enskillment, would have constituted a
maritime knowledge (Pálsson 1994; Rainbird 2007, 55-56), which would have provided the basis for longer distance communication within Orkney.

Figure 7.26 Looking out to sea from Scarry Geo (approximately 200m southeast of the Broch of Burgar)

It is perhaps unsurprising that the sea forms such a significant part of the landscapes of the brochs of Eynhallow Sound, and contributes to the sense of place of each of these dwellings. In terrestrial terms these places are quite closely defined by the natural topography within which they are situated, however this does not mean that the taskscapes of their Iron Age inhabitants were similarly limited. As well as providing economic resources the sea would have been a location of a diverse range of experiences - of food gathering, companionship, and of encounters with other places (Johnson & Shanks 2006), and the physical seascape, including the fauna and flora, would have been as much a part of the Iron Age cosmological ordering of the world, as the hills or fields.
7.4 DISCUSSION

7.4.1 LATE BRONZE-EARLY IRON AGE EXTENSIVE LANDSCAPES?

Within both of the case study areas Late Bronze-Early Iron Age archaeological remains have been recorded. Many of these are discrete and rather isolated examples such as the burnt mound recorded on the north coast of the island of Eynhallow, and there are also several clear concentrations of funerary activity. The interpretations that can be drawn from the nature and distribution of these Later Bronze-Early Iron Age sites and monuments will be discussed in more detail in the subsequent chapters; but with regards to the discussion of the lived experience of the landscape the best resource is the Peerie Hill/Billia Fiold settlement at the southern edge of Yesnaby.

By considering the overall environment of the Peerie Hill roundhouse it is possible to see that certain practices and the sites with which they are associated were positioned in different places within the landscape. Thus the dwellings are located on flat hilltops, burnt mounds in low-lying, boggy places with limited visibility, funerary monuments focused upon ridgelines and so on. The way in which these sites sit within their immediate landscape, and the views and pathways which connect them with other places gives each place a distinct feel, or sense of place. The practices, people and animals which would have been associated with each of these in the past would have further developed the genius loci of each place – the presence of other family members at the Peerie Hill roundhouse for example perhaps enhancing a sense of belonging for its inhabitants.

The Peerie Hill/Billia Fiold settlement and the surrounding monuments represents as I have suggested above a comparatively complete landscape, albeit not a contiguous one. Each of
these places occupies a distinct position within the landscape and thus movement becomes fundamental to understanding and experiencing this landscape. Movement of livestock and people would have created paths between and within these different places and these acts of movement would have further served to further imbue some of the places, such as the cross-contour dykes, with a sense of movement whilst also heightening the comparative stillness and pause of others. In this sense it is perhaps also possible to begin to understand the more isolated Late Bronze Age elements recorded elsewhere within the case studies in a similar manner, as distinct elements within wider landscapes in which Late Bronze Age people would have moved and interacted with both the natural environment and with other people.

7.4.2 Creating Territories in the Middle Iron Age?

During the Middle Iron Age a strong trend develops towards the use of local topography to help create a sense of place in which each broch, or broch group was located. In contrast to the diverse spaces of the Later Bronze-Early Iron Age, these sites have been carefully chosen to make use of natural features that create a sense of bounding. In the case of Borwick the inhabitants perhaps felt that the natural features were not sufficient to create this sense of bounding, and as a result enhanced the visual ‘edge’ of the space by constructing the large dyke to the north. Given the incomplete nature of this dyke and the apparent absence of similar features related to other brochs, I would further suggest that this dyke served a primarily conceptual role, rather than acting as a physical boundary.

This is not to say that individuals associated with these settlements would never have set foot beyond the pale. There can be no doubt that hill-land and the marine environment would have provided an important range of resources, and opportunities for longer distance travel, and thus would have been part of the mental maps of the Iron Age inhabitants, but these activities would have been undertaken on less frequent, perhaps seasonal basis, and conceivably only by
certain individuals within the social group. These areas would therefore have been constructed and perceived in a different manner to the well-defined and comparatively small territories within which the considerable majority of day-to-day life would have been carried out. Within each of these territories, people would have lived and worked, moving within and between the spaces, as they tended livestock, cultivated fields and repaired structures. Through these repeated acts of dwelling I would suggest people would have not only constructed a meaningful world with a clear sense of place, but also developed a level of familiarity and close attachment which brings to mind Relph’s (1976) ‘insideness’ and thus the broch and the defined landscape in which it was positioned would have represented a strong element of the identities of the group and individuals who inhabited the place.

7.4.3 LAND AND SEA

Like the majority of brochs in Orkney, the examples discussed within the case study areas are all located close to the sea. Although failing to consider the relationships between inland brochs and other bodies of water and landscape settings, a close connection between broch and sea is traditionally seen as typical of broch settlements (Fojut 1982; MacKie 2010, 103). However this generalisation belies a wide variation in the relationship between the land and water at each of these sites, and the contribution that the presence of the sea makes to the sense of place at each broch.

![Figure 7.27 Comparative views of the coastline at the Knowe of Swandro (left) and North Howe](image-url)
All of the brochs within the Eynhallow Sound study area share a position on the same body of water; however the Evie brochs (Burgar and Grugar) are situated on low cliffs and are connected to the sea by narrow geos with shingle beaches that slope rapidly up to the land (Figure 7.26). In contrast the Westness brochs are situated above a more substantial rock shelf and to access the sea, the inhabitants would presumably have had to walk along the coast to the larger shingle beaches to the south around the Knowe of Swandro (Figure 7.27). In turn within the Yesnaby-Skaill study area, Loupanessness broch is hidden and sheltered from the sea, but only a short walk brings the sandy bay into view, whilst Borwick is positioned in such a manner that it turns its back on the sea, but dominates the landing place formed by the large geo immediately to the south. The relationship between these settlements and the sea is thus complicated by practical concerns, the physical topography, by vision and by the other senses as well, and it is important to remember that even if the sea is out of sight, it is still present in the smells and sounds of the coast, as well as in the mental geographies of the inhabitants of the brochs.

### 7.4.4 Experiencing the World

Much of the discussion above has primarily focused upon the visual, a well acknowledged product of modern western thought (Edmonds 2006), however everyday perception is characteristically multi-sensual (Rodaway 1994, 11) and the weather, which has been touched upon at various points in this and the preceding chapters, provides an excellent means with which to consider the multi-sensory nature of experience and dwelling within the world.

*Very strong winds and fairly constant horizontal rain...absolutely exhausting, a proper day to be inside...I wonder if they would have knocked off early in the Iron Age?* (JMM - 9\textsuperscript{th} August 2008)
Figure 7.28 The weather and the landscape of the case study areas

“Weather has improved after lunch, as has my mood...the views up here [Burgar Hill] are brilliant, especially because it is so clear...” (JMM 3rd March 2011)

The weather can impact the things that we perceive, the way in which we move within the landscape, the mood and emotions of ourselves and the people we are with, and even the things that we are physically able to achieve. On a cold rainy day it was often harder to motivate myself to start back to work outside after lunch, in the winter patterns of gait were modified to cope with snow and ice, and a foggy day might make the identification of
landmarks and seamarks by which to navigate harder, and the recording sites of sites more challenging.

People do not simply have a perception of the weather, rather it is something that we perceive in - as the weather changes we do not see different things but we do see the same things differently (Ingold 2005b, 102). Different senses come to the fore, or become less useful, in particular circumstances (Figure 7.28) – balance as we move, temperature in cold weather, sight on a foggy day – but our being-in-the-world is fundamentally mediated by the human body, without it we would have no access to a world beyond itself (Rodaway 1994, 31). The weather, the sky, architecture and the earth’s surface all form the medium within which people live, but it is only through this bodily perspective that people are able to experience and make their way through a world as inhabitants rather than occupants (Ingold 2005b, 103).

“Bloody hell! Decidedly windy at the top of the hill [Burgar]...bent over against the wind, making my eyes water, my nose run and my ears ache.” (JMM 11th November 2011)

Although climatic reconstructions can be problematic (See section 4.1) the general trends that can be drawn from them would suggest that during the first millennium BC, Orkney experienced a number of phases of increased wetness, and possibly a decline in storminess, whilst summer temperatures were slightly warmer than the present (see Chapter 4). Much of the research into the impact of climatic change during the holocene has been concerned with the impact upon agriculture and settlement viability. Long- and short-term patterns of climatic change were undoubtedly of significance during later prehistory but it is difficult to assess the degree to which people recognised and reacted – both practically and culturally – to environmental change (Johnston 2008, 279). Whilst for example, a decline in average
temperature of less than 1°C over several decades can have an impact on growing seasons and the viability of certain crops, it would seem less likely that these would be clearly noted as part of people’s day-to-day experience of the weather. I would suggest it is safe to assume that at daily and seasonal scales the weather would have affected the experiences and interactions between people and the landscape. Certainly the changing weather affected my experiences of the landscapes of the two study areas, and represents a significant factor in the repeatability of any of the experiential recording undertaken. This does not devalue the data drawn from them but rather highlights the subtle and ever changing nature of the worlds that people inhabit, both in the past and the present.

7.4.5 ORDERING THE WORLD

Although the cosmological model based on an orientation within the east/southeast arc (Parker Pearson 1996; Oswald 1997) has in recent years received some critique (Pope 2007) analysis has suggested that at least in Orkney this orientation holds true (Crowther 2011, 55). Much of the critique of this model of the orientation of roundhouse entrances is based on rather functionalist concerns with light and wind direction, which apparently overlooks the possibility of Iron Age doors. Both the critique and the original development of this model are based upon the statistical analysis of large numbers of examples of Iron Age roundhouses. Whilst useful in helping to identify trends, such analysis leads to an inevitable decontextualisation of these settlements from their surrounding landscape. The case studies presented above would suggest that this orientation and therefore the broader cosmological ordering extend beyond the roundhouse itself.

Of the seven brochs within the study areas, four – Borwick, Burgar, Grugar and North Howe – appear to have entrances orientated towards the southeast, Midhowe and South Howe are both orientated to the west, and at Loupanessness a northerly alignment is tentatively
Chapter Seven: A Dwelling Perspective

identified. Initially this would appear to somewhat undermine sunwise cosmological models, or to suggest that these three brochs are atypical when compared to the norm for Orkney (Crowther 2011). When considering the wider settings there is a clear northwest-southeast linearity; at Loupandessness with a focus on the hill of Linga Fiold, and for Midhowe and South Howe along Eynhallow Sound. Cosmological models are by their very nature concerned with ordering and understanding the world, and thus it seems rather surprising that the landscape setting of brochs and roundhouses throughout the British Isles has not been more fully considered. Indeed in all of the examples detailed in these case studies there is a strong south eastern alignment identifiable (Table 7.1) and I would suggest that rather than solely aligning their dwellings in a particular direction, the builders of the broch settlements are drawing together cosmological systems and local topography in order to build in locations that might be considered appropriate or auspicious. Given this structuring why did individual settlements chose to orientation their doorways in different ways? Do these variations reflect social connections or are they perhaps more concerned with focusing on a particular landmark or place within the landscape?

Given the location of all of these brochs close to the sea, there is a perhaps surprising lack of focus of these settlements upon the marine environment. This is particularly apparent in the Yesnaby-Skaill study area where both brochs have a minimal exposure to the sea. This may in part have been a practical response to the fearsome Atlantic storms, but the same concern was obviously not felt by the builders of Midhowe and South Howe, which although not subject to the full force of such storms still face directly out onto the Atlantic. This westerly alignment of these two settlements may reflect a greater concern with the marine environment, Costa Head representing an important seamark as well the change in season marked by the autumn equinox.
<table>
<thead>
<tr>
<th>Broch of Borwick</th>
<th>Orientation of Entrance</th>
<th>Orientation of Landscape</th>
<th>Neighbours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SE – focuses on the break in the hills.</td>
<td>SE – inland towards the break in the hills and the more distant hill of Cringla Fiold.</td>
<td>None directly visible, but SE orientation is towards the interior of the West mainland and the associated settlements.</td>
</tr>
<tr>
<td>Loupandessness</td>
<td>?N – towards the sea albeit this was probably hidden from view by sand dunes.</td>
<td>NW-SE – loch and hill of Linga Fiold to SE feel the primary focus, but sea to the NW adds to sense of alignment.</td>
<td>Possibly orientated towards the Knowe of Verron although the site is not directly visible. Several other broadly contemporary sites are located &gt;1km to the SE beyond the loch of Skail.</td>
</tr>
<tr>
<td>Broch of Burgar</td>
<td>?SE – looks along Eynhallow Sound with both land and sea being visible. The second entrance into the enclosure faces inland to the south.</td>
<td>NW-SE – along Eynhallow Sound</td>
<td>Back of Grugar visible only a short distance to the SE. Other broch sites at Gurness and Stenso also visible but at a greater distance.</td>
</tr>
<tr>
<td>Knowe of Grugar</td>
<td>?SE – looks along Eynhallow Sound with both land and sea being visible.</td>
<td>NW-SE – along Eynhallow Sound</td>
<td>Burgar is behind, Stenso is c. 1km away but hidden from view, Gurness visible but distant.</td>
</tr>
<tr>
<td>North Howe</td>
<td>?S/SE – broadly along Eynhallow Sound, perhaps with a slightly greater emphasis upon the sea</td>
<td>NW-SE – along Eynhallow Sound</td>
<td>Midhowe and South Howe both visible, as is the Neolithic tomb. Settlement and tomb at Rowiegar is just visible.</td>
</tr>
<tr>
<td>Midhowe</td>
<td>W – focused on Costa Head</td>
<td>NW-SE – along Eynhallow Sound</td>
<td>South Howe and North Howe are visible to the sides of the site, location of Rowiegar is visible.</td>
</tr>
<tr>
<td>South Howe</td>
<td>W – looking out to sea</td>
<td>NW-SE – along Eynhallow Sound</td>
<td>Difficult to assess but North Howe, Midhowe and Rowiegar should all be reasonably visible to the sides.</td>
</tr>
</tbody>
</table>

Table 7.1 Summary of the positions within the landscape of the seven brochs in the case study areas. Note that as a result of coastal erosion it is impossible to stand at the entrance to South Howe and thus difficult to accurately assess visibility and orientation, but given the close location it is assumed to be broadly similar to Midhowe.
Figure 7.29 Looking southeast from North Howe overlooking Midhowe and South Howe brochs; the Neolithic tomb is covered by the large ‘hanger’.

The orientation of the brochs also speaks to the relationships that existed between settlements and the people within them. The high density of brochs on Eynhallow Sound highlights this, where with the exception of Midhowe and South Howe, all of the brochs appear to broadly follow the typical south eastern alignment. Thus from the broch of Burgar, it is possible to see the back of the Knowe of Grugar, and in the distance the Knowe of Stenso (with an unknown orientation) and the Broch of Gurness. The latter is around 3km away and therefore visible as little more than a grey blob on the horizon, but again the eastern alignment of Gurness means that at least in terms of entrance orientation these settlements are not looking out onto one another. Amongst these brochs in Evie at least then the orientation of the doorways was not about easy access or observation of neighbours or communal spaces, but instead drew predominantly upon a cosmological order, and only by looking and moving around the landscape would people have been able to see and meet each other. Conversely on Rousay the site of North Howe shares a similar south eastern alignment, but in doing so it overlooks the two brochs (Midhowe and South Howe) further along the shore. Given the lack of a detailed chronology for these sites it is unclear whether North Howe
was built first and the subsequent brochs were positioned in full-view, or whether North Howe is a later foundation intentionally positioned to overlook these settlements, however it is clear that the orientation and slightly elevated position of North Howe provides ample opportunity to observe much of the movement and activity of the inhabitants of the other sites. Rather than providing evidence with which to highlight certain settlements as atypical or subversive, I would suggest that these variations in the orientation of entrances reflect personal choices, dynamic social relationships, and changing interpretations of cultural trends by the builders and inhabitants of the brochs within these study areas during the Iron Age, but that the consistent emphasis placed upon a northwest – southeast alignment in the landscape of all of these sites highlights the continued importance of the underlying cosmological tenant.

7.4.6 Presenting / Representing Places

Various media – photography, maps, drawing and text – have been employed in an effort to explore and consider the presentation of embodied landscapes, and the degree to which they have succeeded be highly subjective. Comparisons between some of the images highlight some of the problems, and strengths, with the ways in which archaeologists represent landscapes and archaeological data.

The ArcScene GIS model of the landscape to the north of the Broch of Borwick (Figure 7.11) enables the Stinkna Geo dyke to be visualised and gives a better understanding of which areas beyond the dyke were visible, and by combining the topographic data with the results of the walkover survey it also highlights the location of several burial cairns on the hill tops to the north of the dyke. In contrast when considered in person (see Figure 7.10) these monuments are barely, if at all, visible to the naked eye even though the hills on which they are situated are. This highlights an important difference between things which are not physically obscured from a viewpoint and are thus ‘visible’, and things which can actually be recognised and
perceived. The perception of a feature within the landscape is a subjective outcome of the human-environment interaction (Lake & Woodman 2003, 695), and whilst attempts have been made to model and quantify visual prominence (e.g. Llobera 2001; 2007) such approaches still I would suggest fundamentally fail to appreciate the contextual embodied human experience, and the subtleties of inter-visibility, observation and recognition of monuments such as is seen at Westness (see Figure 7.19). Hamilton and her collaborators (Hamilton et al. 2006, 44-54) have undertaken experimental work demonstrating that shouting, whistles and broad gestures such as waving are only perceptible up to around 350m away, and that more nuanced communication and movement is only distinguishable at 100m or less. These distances can also be seen to vary depending upon weather conditions, time of year, and indeed individual perception (Ibid. 48), but fundamentally undermine ideas of close observation between communities such as the inhabitants of the brochs at Midhowe and the settlements around the Bay of Swandro.

Tilley suggests that understanding a place is a gradual process of familiarisation in which description is the last act, and that only through writing, rather than the passive act of taking photographs, can a feeling of place being produced (Tilley 2004, 223). However the act of writing almost inevitably becomes an act of theorising about the experience, rather than evoking the places and practices (Wylie 2005, 244; Barrett & Ko 2009, 283-288). Each recording of a walk in the landscape, or the sense of space/place from a certain position in the landscape is by its very nature a decontextualisation of the experience of dwelling, and the creation, or recreation of a sense of place. Such a separation is inevitable, and whilst these records provide a useful aide-mémoire and a good source of material with which to illustrate points, it is the engagement in movement and experience that are the most significant element of the methodological approach to experience (Vergunst 2011).
My involvement in an art and archaeology collaboration during 2011 and 2012, with Rik Hammond (Hammond 2012a; 2012b), has led me to further consider the role of representations of landscapes and places within archaeology. A series of walks around the
Heart of Neolithic Orkney World Heritage Site undertaken by myself and Rik (Figure 7.30) became the subject for a large wall piece as part of the final exhibition. This involved projecting the various GPS tracks that had been recorded and downloaded, onto the wall of the gallery and then tracing over them in pencil – a 6H (as the standard choice for archaeological drawing) for myself and a 6B for Rik. Whist the finished piece is a representation of the landscape, and in particular of our movement and experience of these journeys, the initial walk and the act of producing the wall piece, in which the experiences during the journey and their subsequent remembering between Rik and myself during the drawing, create two further representations of the landscape, places and movement (Rik Hammond, pers comm.).

Many of the presentations of experiential data take a narrative format, that of a journey from one place to another (e.g. Tilley 1994; Wylie 2005; Lorimer & Wylie 2010). Whilst these do address the nature of being-in-the-world, such accounts are by their very nature linear, and are often written by people who are to some degree outsiders or visitors. Thus whilst these authors do dwell (in a Heideggerian sense) within the landscapes they describe, the fleeting, and often singular experience of each landscape does not allow for the development of a familiarity with the spaces, pathways and places. This is not to suggest that my experience of the landscape is somehow more accurate or useful, but rather to highlight the difference of perception that comes from the repeated experience of a landscape, over the single visit.

Several archaeologists have recognised the value of repeated exposure to a site (e.g. Bradley 2003b; Baines & Brophy 2006, 82-87) in developing and refining an understanding of an excavation or monument, and this can be related to Relph’s (1976) insideness, an increasing sense of belonging and understanding that comes from a familiarity and identity with a place, and which enables a subtly different perception of a place. It is perhaps no surprise that the section on the Evie brochs and the spaces around them was more challenging to write than
some of the other parts of the case-studies, the smaller size of the area resulted in having spent less time there, and thus having a less well developed sense of place or belonging.

**Figure 7.31 Dartmoor Time – Richard Long (Long 1995)**

As a product of different people, with different numbers and durations of experiences, at varying times of day or year, and in different weather conditions there is no single definitive experience and in turn no single correct representation of a particular landscape or place. Indeed it is often the intangible aspects of the environment that contribute to the determination of the character of a place (Norberg-Schulz 1980, 14). As such it is impossible to capture a single, definitive *genius loci* of a place and neither words nor images can be substitutes for being bodily in a place (Bender *et al.* 2007, 336). These are however the only options available within traditional publication media and we must try to use text, drawings, photographs and video to communicate a sense of another person’s embodied experiences that might be interpreted empathetically by their audiences (Pink 2007, 250). Rather than the
Chapter Seven: A Dwelling Perspective

representation of the landscape itself, for a number of land artists, such as Richard Long (Figure 7.31) and Andy Goldsworthy it is the visibility of practices, energy and materials that are important (Goldsworthy & Craig 1999; Costa 2012), others use words as art to record experiences (e.g. Fulton 2010) or concrete poetry to explore space as a structural agent (Houedard 1963; cited in Hill 2009). There is a contradiction between words and images, thus writers have used visual strategies to explore the communicative value of description whilst artists have used language to question the conventions of representation (Hill 2009, 10). With both the text and images within this chapter I have aimed to present a series of experiences, my own and others, of the places within the study areas, in ways which are perhaps somewhat ambiguous or challenging in the hope that it might prompt the audience to more actively engage and consider their responses.

7.5 CONCLUSIONS

An understanding of a landscape cannot come simply from the inscription of paths and spaces onto a map. It is only through acts of movement and living that meaningful worlds are constructed and therefore only through the consideration of these acts of dwelling does it become possible to appreciate how people constructed their worlds in the past (de Certeau 1984; Ingold 2000, 172-188; Fitzjohn 2007, 40). By drawing on the embodied perspectives of myself and of other individuals I have explored some of the different experiences of moving and working within the two arbitrarily defined landscapes which form the case-studies presented in the preceding chapters. Whilst these modern experiences do not form a simple proxy for the later prehistoric inhabitants of these fields and roundhouses, they have provided a means of considering variations in experience, identification, narrative, interpretation and understanding of the different places within these landscapes.
Christian Norberg-Schulz (1980, 11) suggested that the phenomena of place could be analysed by means of two categories; space and character. The former conveys the three-dimensional organisation of the elements which make up a place and with regards to the case-studies has been discussed primarily in Chapter 6, whilst the latter denotes the general atmosphere which is the most comprehensive property of any place, and has been the primary focus of this chapter. The intimate and repeated experience of the landscape and of the places constructed within it as detailed above has provided insight into ways in which people in the past constituted their world, both physically and conceptually, and how these forms appear to have changed during the Early to Middle Iron Age.

Consideration of the ways in which people experience their environment has also highlighted the rich variation, as well as some of the underlying similarities, in the ways in which places may have been constructed during the Middle Iron Age. The contrast between the two most visibly accessible and extant brochs, Midhowe and Borwick, serves to illustrate this difference well. Midhowe is situated cheek-by-jowl with two other brochs creating the potential for complex social relationships and interactions. In contrast the Broch of Borwick, through the use of a variety of different boundary features, and its position within a natural bowl in the landscape gave a direct visual dominance of a comparatively small area of landscape, and in doing so isolated the inhabitants from other brochs and even earlier settlements. When considering solely the architectural elements and their relation to the suggested solar-centric cosmology the two roundhouses are dramatically different. However when considering the relationship between each broch and its environment, more subtle structures become visible which suggest the movement of the sun, and particularly a south eastern alignment may have been a key cosmological tenant.
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Within the broch settlements discussed in these case-studies there are similarities and trends that speak of variation in economic strategy, cosmological ordering and social relationships, but what is clear is that there is also great variation in the ways that different groups constructed the places they dwelt in. Thus although wider shared social and cosmological systems would have played a clear role, I would suggest that the brochs studied here provide evidence of diverse, inter-connected, messy social relationships and identities, which would have been constructed, maintained and reworked at a variety of different spatial and temporal scales, but which would have been closely focused overall upon the home.
8 CHAPTER EIGHT: PLACE AND LANDSCAPE IN THE FIRST MILLENNIUM BC

Through the application of a suite of quantitative and qualitative theories and methods, the fieldwork presented in the preceding chapters have considered a number of the later prehistoric landscapes in Yesnaby, the Bay of Skail and Eynhallow Sound and the ways in which people constructed and experienced these worlds. This identified a number of threads which I will draw together and contextualize in the following discussion. The increasing importance of, definition and of commitment to place, together with an intensification of practice, definition of insiders and outsiders, and referencing of the past all suggests changing tenurial relationships between people and the world during the first millennium BC, and has important implications for the ways in which relationships between people, and between people and the world in which they dwelt were structured, perceived and understood.

8.1 EXTENSIVE AND INTENSIVE LANDSCAPES

The sites and landscapes explored in the Yesnaby-Skaill, and Eynhallow survey areas illustrate a shift from an extensive to an intensive structuring and use of space over the course of the first millennium BC. This is particularly clearly identified through the walkover survey, which although made problematic through the varied level of preservation of some sites, provides a large scale with which to consider the landscape, shifting the focus away from individual sites to consider a range of landscape features. A growing permanence and focus of activity can be broadly identified across Britain during the later prehistoric period, with settlements becoming more permanent, agriculture becoming more intensive, seasonal occupation and mobility declining, and spaces being reproduced for longer periods of time (Barrett 1994; Brück 1999; Johnston 2008). This has been less explicitly recognised in Atlantic Scotland, likely a result of the prevalence of site-specific approaches, which have centred upon consideration of the
settlement record at the expense of other aspects of the landscape (ScARF. 2012k). But sites such as Upper Suisgill (Barclay 1985) and Achany Glen (McCullagh & Tipping 1998) (both in Sutherland) do provide evidence for sequences of periodic occupation, abandonment and cultivation during the Bronze Age and Early Iron Age. In addition where larger scale survey approaches have been utilised, shifts in settlement patterns can be recognised. In South Uist there is an increased emphasis on sedentism and permanence, with the development of a number of substantial settlement mounds during the Later Bronze Age and then the emergence of brochs during the Middle Iron Age, at which point there appears to have been a major reorganisation of the landscape, in which settlements were positioned regularly along the machair (Parker Pearson et al. 2004, 61-102; Parker Pearson 2012b, 412-415)

Figure 8.1 Sites around the Late Bronze-Early Iron Age settlement on the Peerie Hill, Yesnaby (looking southwest) Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.

The range of features recorded on and around the Peerie Hill, Yesnaby (Figure 8.1) represents an incomplete but extensive extant landscape, likely dating to the Bronze Age. As such it
Chapter Eight: Place and Landscape in the First Millennium BC

represents a significant addition to our knowledge of the Bronze Age landscapes of Orkney. Alongside the excavation of Bronze Age structures at Tofts Ness (Dockrill 2007) Skail, Deerness (Buteux 1997, 24-37) and the Links of Notland (Moore & Wilson 2011) and the recognition of other areas of potentially Bronze Age landscapes such as at Spurdagrove (Hedges 1978), Wasbister (Robertson 2005), and Old Head, South Ronaldsay (Lillie et al. 2010) this provides clear evidence with which to challenge the perception of the Orcadian Bronze Age as a period of ‘dull isolation’ and ‘recession’ (Ritchie 1995, 86-95) in which the landscape was dominated by funerary monuments and burnt mounds (Øvrevik 1985). The idea of a Bronze Age ‘decline’ shaped by environmental deterioration has been successfully challenged (Farrell 2009) and when considered at the broadest scale the large number of barrow cemeteries and burnt mounds can be seen as indicative of a well-populated landscape. This increase in the numbers of recorded settlements and fields, alongside the convincing interpretation of burnt mounds as non-domestic in nature (Dockrill et al. 1998; Anthony 2003, 69-71) presents instead a picture of an extensive use of the landscape during the early part of the first millennium, with specific practices located in discrete places. Thus burnt mounds are found in low, wet areas, settlements and fields are focused upon defined and lower lying hilltops, whilst steeper slopes are utilised for both funerary monuments and also cross-contour dykes. This extensive and carefully organised use of space appears to continue into the early Iron Age, although the range of locations in which simple roundhouses are found does become broader. Sites such as Pierowall, Westray and Bu, Stromness are situated in prominent locations on the edges of low hills (Sharples 1984, 119), a position not dissimilar to the Peerie Hill roundhouse, however there are others such as structure 5 at Tofts Ness, Sanday (Dockrill 2007) and structure 2 at St Boniface, Papa Westray (Lowe 1998) which are in more coastal, lowland locations.

Whilst these early Iron Age builders of roundhouses made use of a fairly wide range of topography, by the Middle Iron Age the choices made by people in determining where to build
were becoming increasingly focused on certain types of topography and location. The fieldwork has demonstrated that brochs were carefully positioned in relation to the local topography in order to aid in the creation of visually limited areas of the landscape; this positioning afforded the inhabitants of the brochs good visibility in the near and middle distance, at the expense of longer range views from their settlements. GIS analysis supports this emphasis which appears to be a trend found widely across Orkney (Rahn 2007, 186). All of the Middle Iron Age sites discussed in the case-studies, both the brochs at Borwick, Loupandessness, Burgar, Grugar, North Howe, Midhowe and South Howe, and the non-broch sites at Swandro and Rowiegar are found in coastal locations, with efforts also made to position these settlements as close as possible to both hill and lowland areas, choices which are particularly well illustrated at Loupandessness (Figure 8.2).

Even if we accept the most extreme estimates of marine erosion, the majority of Orcadian brochs would have been originally located close to the sea, and even those brochs not located near the coast were built on or close to the shores of lochs (Rahn 2007, 192-193). There are a small number of brochs that are located further from these shorelines, for example Netlater, Harray (Petrie 1890, 78-81) which is more than 1.5km from the nearest loch, but in general proximity to water (either sea of freshwater) was apparently an important consideration in siting a broch. This is common across Atlantic Scotland, with similar trends having been noted in parts of Caithness (Baines 1999), the Western Isles (Armit 1992, 109-125) and Shetland (Fojut 1982). These coastal locations have been interpreted as transitional, or liminal, positioning the brochs between cultivated and marginal areas (Sharple & Parker Pearson 1997, 262-264); Baines (2005, 184) suggests that the positioning of Iron Age settlements, and hence the human presence, at the edge of the everyday domestic world, provided a means of allowing the tensions and stresses of social and natural relationships, to be controlled and mediated outside the ambit of the agricultural landscape which provided a fundamental
economic and spiritual core to life. The role of broch architecture in mediating complex social relationships has been widely accepted and the case for the central importance of agriculture as a cosmological referent has been well argued by Williams (2003). However whilst the limited exploitation of wild resources in much of Iron Age Britain has been seen as evidence of an increasing divide between nature and culture, this does not appear to have been as strong in the coastal and island communities, such as Orkney, where wild terrestrial and marine species were much more widely exploited (Willis 2007; Mulville 2008, 234).

Figure 8.2 The location of the two Middle Iron Age sites in the Bay of Skaill (looking northwest). The central location of Loupandessness broch in relation to the different areas of the landscape has important considerations both in terms of access to economic resources and cosmological structuring of the world. The Knowe of Verron also had access to a variety, albeit not as broad, of different areas. Terrain model derived from OS Profile DTM data © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.
Therefore although accepting Baines’ (2005, 184) assertion that brochs were positioned at the edge of arable landscapes that provided a timeless metaphor within which later prehistoric lives were situated, I would suggest that in Orkney at least, ‘natural’ areas such as hill land and the sea retained a greater economic and cosmological role. As such although broch settlements are being intentionally positioned at the edge of the everyday agricultural landscape, they also occupied a central place – between different parts of the landscape – in the physical and conceptual Iron Age world.

Although some variation is identifiable, I would argue there is then a common set of themes in the structuring of relationships between broch settlements and the physical and natural landscapes in which they were built. However the relationships between brochs seem to have been more varied. The three brochs of the Westness, Rousay group are readily intervisible and movement over the short distances between them would have been quick and physically straightforward. In contrast the Broch of Borwick is visually isolated and communication with other broch settlements would have required travelling a minimum of several kilometres. These are not considerable distances, and regardless of whether travelled on land or sea, a round trip could easily have been undertaken in the space of a day, but significantly such a journey would have required leaving the familiar place around Borwick. These two examples represent the extremes of clustering and isolation in the distribution of brochs in Orkney (Rahn 2007), and a more typical example might be suggested by the two brochs at the Bay of Skaill (Loupandessness and Knowe of Verron). These two settlements are located on either side of the bay (Figure 8.2), and would barely if at all have been intervisible during the Iron Age (see Chapter 7) and a walk of approximately half an hour² around the bay would have been required to move from one settlement to the other.

² Assuming a walking speed of approximately 1.5m/s (5.4kmph) (Levine & Norenzayan 1999)
Intervisibility and movement are also central in considering the relationships between brochs and other forms of settlement and activity. The broch settlement at the Cairns o’ the Bu, South Ronaldsay is located approximately 500m uphill from a souterrain and associated roundhouse at Windwick (Figure 8.3) and although excavation and analysis is still on-going there is a degree of contemporaneity between the sites (Martin Carruthers pers comm.). The relative positions, in which the broch overlooks the less substantial site, might traditionally be interpreted as reflecting a controlling or hierarchical relationship, however the excavator points to the different nature of the two sites to suggest that they represent different types of practice and/or social groups within the landscape (Carruthers forthcoming). An interpretation of
control is also undermined by the distances involved; whilst the sites would be intervisible and the human form distinguishable, the distance between the sites would preclude the identification of sounds and gestures (Hamilton et al. 2006, 44-54) and of course many activities would or could have been undertaken inside or underground away from any observation. The relationship between the group of brochs at Westness and the two possibly domestic settlements that reuse the Neolithic tombs at Swandro and Rowiegar (Chapter 7) is at nearly 1 km even more distant. Even the possibly contemporary simple roundhouses identified in the gradiometer data at the Bay of Skaiill are more than 200m from Loupandessness broch, and as such only the broadest and loudest gestures such as shouting and waving are likely to have been perceived.

The experience of dwelling within the Middle Iron Age landscape of Orkney then would have been one in which the inhabitants of individual settlements, whether brochs or simple roundhouses, would have exercised a reasonable degree of independence from one another, undertaking the majority of day-to-day tasks close to their respective homes, with little observation by or of other groups. However the relatively close proximity of these individual groups implies a strong degree of social connection and interaction, perhaps with exchanges of resources and/or labour at certain points in the year, and also the negotiation of use and access to other parts of the landscape. The Iron Age house can be identified as developing increased importance as a central place, both as a house and as a communal monument. I would argue that other places in the Middle Iron Age landscape are situated in relation to the brochs, with different places being further away or closer to the home, with differing degrees of connection. This represents a departure from the Bronze Age, when the house is only one, albeit important, part of people’s world, in which a diverse range of other places – burnt mounds, fields, funerary monuments, upland dykes – are connected together in networks of movement.
8.2 STRUCTURING SPACE AND STRUCTURING RELATIONSHIPS

Related to the trend towards more intensively focused and localised landscape use during the later prehistoric period, the ways in which boundaries were used to order and structure space can also be seen to change over the course of the first millennium BC. During the later Bronze Age, boundaries are just one way of forming places within the landscape and many of the physical boundaries that do exist are likely the result of the gradual development of places, rather than intentional design. But during the Iron Age many boundaries became more formal and elaborate, being used to deepen space, and mark definite insides and outsides. This change in the ways in which people were using boundaries implies very different conditions within which social relationships and structures were being constructed and maintained.

There are a range of types of boundary feature that are identifiable in the Later Bronze Age landscapes, each of which can be related to particular practices and types of place. The linear boundaries running up into the hill land above the Peerie Hill bear a striking resemblance to large cross contour dykes running across hill land have also been identified in parts of Shetland (Hedges 1984, 55). I would suggest that these sit well within the tradition of coaxial field systems that have been recognised across the British Isles (Field 2008). These boundaries at the Peerie Hill, Yesnaby lack the grand scale of the famous examples from Dartmoor (Fleming 2008) and the chalk downland of Southern England (McOmish et al. 2002; Yates 2007), but the similar, cross-contour alignment would imply a shared concern with the structuring of world, and perhaps add weight to interpretations of these features not as a unitary, pre-planned reorganisation of the landscape, but as part of a reflexive development of boundary features which related to land-use, tenure and social relationships (Johnston 2005a). The smaller field-systems identified in a number of places around the Peerie Hill settlement also have parallels in Atlantic Scotland and further afield, although we must be cautious to not assume all field
systems are the same, or indeed represent the same practices. In both Orkney and Shetland the individual fields are generally small (c. 600-1800 sq. m), irregular in shape and often make use of natural features to complete, and on occasion visually enhance, the boundary (see chapter six and Hedges 1984; 1986; Dockrill et al. 1998; Turner 2012). Ard marks have been identified at a number of later prehistoric sites such as Tofts Ness, Sanday (Dockrill 2007) and Upper Suisgill, Sutherland (Barclay 1985), and the frequent recovery of worn ard points from Bronze Age domestic and funerary contexts (Hedges 1979; Downes & Lamb 2000) indicate that the use of ard cultivation was common throughout prehistory in Atlantic Scotland. With this in mind it is striking to note that the sizes of ‘fields’ discussed above correspond closely to the size of area which can be cross-ploughed (c. 750 sq. m) or ploughed in one direction (c. 1500 sq. m) in one day by a pair of oxen pulling an ard (Nielsen 1993, 123; cited in Petersson 1999). Similar field systems have been recorded across many highland areas throughout Europe and are characterised by combinations of walls, banks and lynchets that create irregular enclosures (Feachem 1973; Bradley 1978; Harris 1984, 209-212; Johnston 2001) and in their irregularity of form and variability of construction stand as different to the classic ‘Celtic’ field-systems (ScARF. 2012f). A series of small excavations on the island of Arran recorded a number of areas of late prehistoric ard cultivation which were not completely enclosed, often only bounded on one side by a bank, which in many instances had been intermittently reworked throughout the prehistoric period (Barber 1997). At Kilphedir, Sutherland, cultivation plots associated with Middle Iron Age hut-circles, are defined by a series of boulder alignments and banks which are a product of heaping stone at the edges of these areas, effectively forming linear clearance cairns (Fairhurst & Taylor 1971, 88). Although extant earthworks often give an impression of a coherent plan relating to a single phase, this generally obscures much greater complexity in the chronology, form and use of these areas of cultivation. An excellent example of this is provided by the extensive excavation of similar late prehistoric fields in Sweden (Figure 8.4)
which demonstrated the variability with which an individual plot could be defined and only partially enclosed, and how these boundaries varied over time (Petersson 1999).

Figure 8.4 Plan of the field-system at Hogstads socken, Östergötland, Sweden (Petersson 1999, fig 3). Fields A & E have been dated to 720-210BC, and field D has been ascribed to the period 100BC – AD600, however evidence of intermittent cultivation and modification of these soils has also been identified from the late Neolithic to the post-Medieval period.

Therefore rather than being designed and built, these spaces in the Late Bronze Age landscape are inscribed through a series of repeated agricultural practices. Processes of moving livestock, ploughing and clearing stone serving to create and define places as distinct from the surroundings area. Interpretations of these Bronze Age landscapes as laid out within an overarching scheme (see Fleming 2008) have been strongly critiqued, with clear evidence of both field-systems and co-axial boundaries across Britain having developed and been
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reworked over time (Johnston 2005a). Although such features have been recognised elsewhere in the British Isles, the boundaries and other landscape features recorded around the Peerie Hill, represent an important contribution to the identification of similar ideas of the use and structuring of the Bronze Age landscape in Orkney. These features, form what to the modern eye, appear to be enclosures, but these acts of bounding and controlling access to a space may have been a secondary concern, or at least not part of the original intent of many of these features. Instead I would suggest that the spaces created and defined as such are the products of the practices of arable and pastoral agriculture during the Bronze Age, and similarly the possible clearance cairns recorded in the area would have helped to identify the areas of the landscape as a particularly place. Thus place was created primarily through the location of individual practices being situated in discrete parts of the landscape. Many of these places remained physically unbounded, and where boundaries do occur they often appear to be gradual and piecemeal developments, which reflect areas of repeated practice.

However over the course of the first millennium it is possible to observe an increasing emphasis on the explicit use of boundaries to define and demarcate spaces within the landscape. A general trend of elaboration and enclosure has been widely recognised in the latter half of the first millennium BC (Bowden & McOmish 1987; Thomas 1997; Armit & Ralston 2003; Giles 2007a; Wells 2007), and the complex settlement boundaries and massive brochs of Atlantic Scotland reflect this. These boundaries create the conditions by which people constructed relationships with other groups and can be seen to reflect feelings of identity and belonging (Giles 2007c; Wells 2007). All acts of enclosure create an inside and an outside, and thus insiders and outsiders, but what is particularly significant in the Iron Age is the size and elaborate nature of these acts of enclosure, both in terms of boundaries and buildings, and how they are arranged in relation to one another.
Figure 8.5 Approaching and entering Midhowe broch
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All of the broch sites surveyed as part of the fieldwork clearly demonstrate the presence of substantial boundaries that create separation between the broch settlement and the surrounding landscape. The exact form of enclosure varies between sites, with some settlements such as Midhowe and Loupandessness making use of natural features to enhance the depth and complexity of enclosure, whilst other sites such as Grugar and North Howe are positioned in fairly flat open areas and employ combinations of ditches, banks and walls. We can also be confident that having negotiated these enclosures, entering the house itself would have required navigating extramural buildings, passageways, and multiple thresholds and doors (Figure 8.5). Even entrance to the early, and comparatively simple roundhouse at Tofts Ness required navigation through an annexe running concentrically around the southern and eastern sides of the roundhouse, before reaching the entrance to the roundhouse itself which would have required crossing a further threshold stone and a door which could be barred from the inside (Dockrill 2007, 52-70). The human experience of entering these settlements was therefore not simply one of moving from inside to outside, but of marking a series of transitions, from one space to the next, progressively moving deeper into a settlement and further from the outside.

This emphasis on the control and definition of space during the Iron Age is also evident in the wider landscape, as evidenced by the recognition of ‘territories’, defined both visually and physically, around broch settlements in Orkney. Such spaces were defined primarily on visual grounds, but also through the use of natural features, and on occasion the construction of physical features such as the Stinkna Geo dyke at Borwick (Chapter 6). The potential for ‘territories’, defined by a combination of visual limits, natural features and occasionally architectural boundaries has been identified at a number of sites elsewhere in Atlantic

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3 The entrance to the roundhouse itself was modified several times during the life of the building, but was consistently a feature that was both monumentalised and incorporated multiple thresholds.
Scotland (Baines 1999, 213 & 223; Rennell 2009, 233-241; Turner 2012, 97-104) and suggests a persistent desire in the Iron Age of the region to mark the edges of a day-to-day world. But the limits to these worlds were often not precisely defined, presented little impediment to movement, and did not create defensible barriers. Instead they served to mark the edge of a distinct space, thus once a person had crossed this edge, they were inside (Relph 1976). This marking of insideness is repeated in the negotiation of the elaborate entrances to brochs, and in the crossing of the multivallate enclosures that surrounded these sites, and we can therefore consider the Iron Age landscape as a series of nested spaces. As such for a visitor from another settlement to gain access to the interior they would have been required to negotiate access first to the associated territory, then the settlement, and finally the elaborate entrance to the roundhouse itself.

Anthropogenic soils were identified in the gradiometer survey at a number of brochs within the case-studies areas. The significance of these soils will be discussed in greater detail below, but what is striking is the lack of evidence for enclosure of these important resources, which sits in sharp contrast to the emphasis placed upon the use of boundaries in other parts of the Middle Iron Age landscape. These areas of soil, and the crops that would have been cultivated on them, lay outwith the multivallate enclosures and thus were, in modern terms at least, unprotected. The potential for broch communities to have existed within societies afflicted by internal conflict and feuding has been suggested through analogy with other historically and archaeologically studied ‘tower houses’ (Parker Pearson & Sharples 1999, 360-362). But such disagreements are unlikely to have taken the form of all out warfare, instead having been focused upon more formalised combat (James 2007) and I would argue that the unbounded nature of these anthropogenic soils provides evidence to support such an interpretation. If viewed in more modern terms of the destruction of property that might be useful to an enemy – a ‘scorched earth’ policy – then the crops grown in these plots could have easily been
damaged, having a direct impact on the wealth and potential survival of the inhabitants of the broch. Instead I would propose that these staple resources were protected through social norms, and that the focus for small-scale conflict may instead have been directed in more formalised ways at mobile resources such as livestock or at the taking of human trophies (Armit & Ginn 2007, 128). Such approaches to conflict have been recorded in many ethnographic studies of pre-industrial and non-state societies (Armit et al. 2006, 1-2; James 2007) which are more concerned with negotiating relationships between groups rather than for explicitly economic or territorial gain.

During the first millennium there is then considerable variance in the ways in which space is structured, and also in the ways in which physical boundaries were both formed and understood. De Certeau’s (1984) concepts of strategies and tactics provide a useful means of considering these different spaces. Thus the substantial and elaborate marking of transitions from one space to another evidenced by the ‘territorial’ boundaries, multivallate settlement enclosures, and broch doorways, reflect a concern by the builders with controlling movement and access. These strategies are a demonstration of power in, and over, these spaces. Conversely those areas of the Middle Iron Age landscape which are apparently unstructured, and the earlier landscapes in which boundaries have developed in a more piecemeal fashion imply a lack of spatial domination. This is not to suggest the presence of two social classes in these landscapes. Rather it reflects the ways in which the landscapes were structured, with some places being more strictly controlled than others. In controlling and defining places they are classified and made tangible (Tuan 1977, 100). The development of elaborate boundaries during the Iron Age was concerned less with physical protection, and more with creating and defining spaces. In defining an inside and outside, insiders and outsiders – people who belong and people who do not – are also created. In addition as Giles (2007a, 247) has observed the creation of thresholds and barriers also provides the opportunity for acts of trespass and
transgression; tactics to manipulate place and contest spatial domination (de Certeau 1984; Low & Lawrence-Zuniga 2003).

There were then two ways in which places were defined in these later prehistoric landscapes; through acts of repeated practice which both physically and conceptually would have marked out the space as different, and through acts of enclosure which would have marked the transition from one space to another. The growing emphasis upon emphatically bounding space during the latter part of the first millennium provides clear evidence for changing conditions through which social relationships were created and reworked. Individual Middle Iron Age broch communities became very clearly spatially defined. In exercising strategies of spatial domination the social group, most likely of an extended family size, was defining themselves and the part of the world in which they lived, as distinct and intimately connected. In this context of closely defined households with well-developed tenurial claims the scope for disputes between social groups can be clearly seen, yet individual households could not have survived in isolation (Hill 2011, 250). As such, relationships between households and within extended communities must have been both unstable and also carefully negotiated and moderated through social and cultural practices, the extremes of which are perhaps suggested by the evidence for ritualised warfare, raiding and head-hunting (Hingley 1992, 19; Cunliffe 2010, 541-542; Armit 2011).

8.3 AGRICULTURAL PRACTICES AND IDENTITIES

The use of gradiometer survey as an interpretative, rather than a purely prospective, tool proved particularly successful in identifying a range of features associated with the broch settlements investigated as part of the fieldwork. Most notable was the presence of areas of anthropogenically enhanced soils around a number of the broch sites in the case-studies. These are indicative of some of the practice and economic strategies, which people undertook
during the first millennium BC; but as discussed above (section 8.2) there is a lack of evidence of formal bounding of these soils. In practical terms the plots would have been visually different to the surrounding areas and could have been protected from livestock by careful herding. However the lack of substantial physical boundaries around these soils, which clearly fulfilled an important economic role, seems at odds with the importance placed by people during the Middle Iron Age, of acts of enclosure of other significant areas of the landscape. The lack of enclosure suggests that the soils were held as somehow different from other parts of the landscape which did require substantial physical boundaries and may infer instead the presence of a conceptual boundary, defining these places as distinct. Given the increasing emphasis being placed upon defining insiders and outsiders during this period, I would further suggest that such a boundary was based upon a widely held cultural knowledge, such that both residents and visitors would have understood the special status and roles of these soils and treated them accordingly.

Figure 8.6 Section of test pit 2 at Old Scatness (Guttmann et al. 2008, fig 4)
Similar soils have been identified at a number of sites in Atlantic Scotland such as Baleshare (Barber 2003) and Cnoc Stanger (Mercer 1996), but these have generally been identified through coring or small-scale excavation, limiting interpretation of the spatial variation and extent of these agricultural soils. The identification of these soils in a number of the gradiometer surveys builds on the work of Steve Dockrill, Erika Guttmann and their collaborators in Orkney and Shetland (Simpson et al. 1998; Guttmann 2005; Guttmann et al. 2006; 2007; 2008). Through the use of gradiometer survey it has been possible to identify the spatial extents and form of these soils, highlighting the relatively small areas that were being exploited. This underlines the intensity of these practices (Dockrill 2002; Dockrill & Bond 2009), which although cultivating areas of c. 1 hectare or less were still sufficient to provide a staple foodstuff for the inhabitants of the settlement, as well as presumably seed for the following year. The development of these intensive agricultural strategies would have focused a considerable amount of people’s time and resources upon comparatively small areas of landscape, and such a concentration of practices has important implications for the ways in which ideas of place and identity were constructed and maintained during the Middle Iron Age. In the creation and maintenance of these soils, the inhabitants of brochs and roundhouses would have spent considerable periods of time through the year manuring and digging the soils, sowing seeds, weeding and protecting the seedlings from pests, and harvesting the crops, before then beginning the annual cycle again. As such for those people involved in the production of these crops, a significant proportion of their lived experience must have been spent in these small fields located close to their homes. Relph (1976, 43) has argued that places are differentiated through the concentration of intentions, attitudes, purposes and experiences. It follows from this that parts of the human world, such as these small patches of highly significant anthropogenically enhanced soils, in which people would
have spent substantial periods of time throughout their lives, represent particularly strong foci of dwelling and as such particularly significant places.

As well as having a distinct sense of place (genius loci) and representing an important economic resource, these areas of deepened soil would have also played an important role in the establishment of a depth of time and shared history that is so important in the development of a sense of place (Tuan 1977, 183-185; Tilley 1999, 178-183). Such soils are a form of material culture (Wells 2006; Sampietro Vattuone et al. 2008; Salisbury 2012) rich with acts of repeated inscription which in the case of many settlements must have extended back beyond living memory. The development of these soils varied over time and between settlements, ranging from ploughing over old, in-situ middens, to incorporating variously turfs, domestic waste, peat ash, and human and animal manures, with many areas of enhanced soils having originally been established during the Neolithic (Simpson et al. 1998; Guttmann 2005; Guttmann et al. 2006; 2007; 2008) and as such can be seen as a form of social memory, containing both the detritus produced by the previous inhabitants of the settlement and a manifestation of their physical labour. Such acts of referencing and reusing ancestral materials have been recognised in a variety of other aspects of the Iron Age in Atlantic Scotland, including the reuse of Neolithic tombs (Hingley 1996; 2005), the manufacture of artefacts from human bone (Shapland & Armit 2012) and the deposition of human remains in domestic and non-funerary contexts (Fairhurst 1984, 85-88; Armit & Ginn 2007; Armit et al. 2011) and suggests a persistent concern with the past that will be discussed in more detail in the next chapter.

These anthropogenic soils formed an important part of Middle Iron Age landscapes, but at a number of the case-study sites the gradiometer survey indicated an absence of these intensively cultivated fields. Whilst the absence of these soils does not completely exclude the
production of arable crops, it does suggest that at some sites different agricultural strategies may have been employed. The potential for this is clearly indicated at the Broch of Burgar, Evie, where boundary features recorded in the gradiometer data have been identified that may relate to the management of livestock. A similar agricultural strategy can be suggested at Clevigarth broch in Shetland, where field 2 has been interpreted, on the basis of its form, as a droveway (Turner 2012, 510) and, despite some evidence of Neolithic and Bronze Age enhancement, there is no indication of deepened soils dating to the Iron Age (Guttmann et al. 2008). These interpretations of livestock management are supported by the environmental evidence gathered from broch excavations. Sheep and cattle, together with some evidence of pigs have been recorded from Middle Iron Age phases at sites throughout Atlantic Scotland (Bond 2002; Mulville & Thoms 2005), and it is clear that individual strategies varied between settlements. Slaughter patterns and biomolecular analysis have provided evidence for dairying at Scalloway (O’Sullivan 1998b, 128) and a number of later prehistoric sites in the Western Isles (Mulville 1999, 269-271; Halstead 2003; Craig et al. 2005) whilst evidence for beef cattle has been observed in Early and Middle Iron Age phases at Old Scatness (Dockrill et al. 2006, 106).

Variations in agricultural strategies have been comprehensively discussed in relation to the economies of Iron Age settlement (Dockrill 2002; Dockrill & Bond 2009) and to ideas of land-holding (Armit 2002; 2005b) but these differences also highlight the potential for variation in practice-based elements of identity developed by individuals and groups. Agricultural practices would have formed a considerable part of the day-to-day lives of the majority of people during later prehistory and as such would have played an important role in how they perceived themselves, and were perceived by others (Figure 8.7). Through the year a broad seasonal cycle of agricultural activities can be identified: fields manured and soils cultivated, seeds sown, livestock giving birth, crops weeded, animals moved from winter quarters to summer
pastures, crops harvested and stored, boundaries repaired and so on (Reynolds 1979; Parker Pearson & Sharples 1999, 23-24; Williams 2003; Cunliffe 2010, 407-445). At appropriate times of the year wild resources would have been collected: berries, peat and heather from upland areas, shellfish, driftwood and seaweed from the coastline (Ceron-Carrasco et al. 2005). Other important industrial resources such as iron ore (perhaps in the form of bog iron) and building stone may have been accumulated when available, or gathered in preparation for specific projects, and daily routines of checking livestock or collecting fresh water would have also been undertaken. Such daily and individual tasks are almost impossible to recognise archaeologically although we can be confident that they were undertaken. However other practices, particularly at the community level are more readily identifiable.

Identity can be defined as practices that concern the reproduction of relations; something one does rather than something that one is or has (Ingold 2000, 140-146; Giles 2007c, 105-106). As such these agricultural practices would have created, maintained and reworked relationships with people, places, animals and equipment to contribute elements of people’s identities. Recent parallels can be drawn from 18th century documents which record for example that Orcadians were admired for their skills as boatmen and for their hardy qualities (Thomson 2008b, 199), whilst the best climbers [to collect seabirds and eggs] in Shetland were said to be from Foula (Fenton 1997, 514). A mixed economy of arable and pastoral farming appears to have been the norm in Atlantic Scotland during the later prehistoric period, and whilst the evidence presented above is not enough to suggest mono-culture approaches to agriculture, there are undoubtedly indications of a degree of specialism at different settlements. The agricultural strategies chosen by separate communities would have resulted in different daily and annual cycles, different tasks being undertaken, different types of place being created in the landscape and individuals having different skills and responsibilities. It also seems probable that communities in less fertile areas may have placed greater emphasis on the exploitation of
'wild' resources such as nesting seabirds, fish and marine mammals (Fujita 1982, 48-52; Rahn 2007, 203). As an example the evidence suggests that the management of livestock played a greater role in the lives of the inhabitants of the Broch of Burgar; we can understand individual identities in terms of the network of relationships with animals, places and other people that were a product of these agricultural strategies and relationships between the community who inhabited the Broch of Burgar, and other broch groups would have also been informed by this emphasis on livestock.

Figure 8.7 Arable and pastoral tasks would have required different bodily movements, equipment, skills, would have been undertaken in different parts of the landscape and may have involved different members of the community (© National Museums Scotland. Licensor www.scran.ac.uk.)

Within communities people may have then identified themselves, and been identified by others, at least partially, through particular skills and specialisms, tasks or responsibilities, and on a larger scale the identity of separate communities may have drawn upon the similar aspects, perhaps the quality of cattle they farmed, their skill at navigating and fishing at sea, or
the quantity of cereal crops they produced. Therefore although we can identify a number of shared elements of identity across Orkney and Atlantic Scotland, such as building and inhabiting circular homes, it is also possible to recognise diverse, if subtle, variations in individual and group identities, through the practices that people undertook and the places and spaces that they created.

8.4 CREATING PLACES

In addition to identifying a range of archaeological features and practices used in the structuring of later prehistoric landscapes, it has also been possible to distinguish more subtle aspects of the ways in which people were positioning features within the landscape in order to create places. This is a product of thinking about how these landscapes may have worked from a human perspective and offers some balance to the birds-eye views commonly provided by maps and aerial views of the landscape. This has highlighted the value of the phenomenological perspective which in addition to the explicit methodological approaches detailed in chapter seven has also permeated the other aspects of the research both in terms of the awareness of an embodied perspective during the walkover and geophysical surveys, and also in the consideration of maps, 3D models and aerial photographs during the analysis and interpretation of the results.

Of particular note has been the recognition of a south-eastern orientation within the landscapes of the Middle Iron Age in Orkney. All seven brochs considered as part of the case-studies were shown to have been carefully located within the landscape; positioned relative to the topography and to bodies of water, in order to create a sense of a south-eastern orientation within the local landscape (see Table 7.1). The underlying geological structure of the archipelago can be seen to create a predominant south-eastern ‘grain’ in the landscape, influencing movement and visual limits. But to fully appreciate and articulate this, it would
have been necessary to position sites in appropriate places within the landscape. Rather than viewing this as an environmentally deterministic relationship I would suggest that conscious choices were being made to locate settlements in the most auspicious positions possible, and that this axis was a significant element of the cosmological ordering of Middle Iron Age Orkney. Previous discussion of Iron Age cosmological models has also tended to focus upon the roundhouse as a microcosm of the world (Parker Pearson 1996, 119). Whilst this is common in many parts of the world (Ibid.) I would argue that given cosmological models structure the relationships between people and the world in which they dwelt, there is value in considering the wider landscape in which people were building, as well as the architectural elements themselves.

The south-eastern quadrant has been identified as a significant element in Iron Age cosmologies and has been related to the importance of the sun and its movement (Parker Pearson 1996; Fitzpatrick 1997; Oswald 1997; 1999). Pope (2007, 212-214) has suggested that the importance of the sun in structuring roundhouses is difficult to sustain, however a strong trend in the orientation of roundhouse entrances in the south-eastern quadrant continues to be identified in many parts of the British Isles (e.g. Pope 2003; 2007; Ghey et al. 2007; Crowther 2011). In Orkney both the trend in orientation of entrances and of the manipulation of a landscape axis lies within the arc of sunrise during the winter months (Figure 8.8). There are exceptions to this, including Midhowe broch, and there is certainly scope for greater regional and individual variation than originally proposed by Oswald (1997) and Parker Pearson (1996; 1999). But I would argue that these common alignments represent a significant factor in determining how and where a broch or roundhouse was built, and whilst functional interpretations can be suggested for the orientation of entrances it is difficult to identify a practical purpose behind the manipulation and creation of such an axis within the landscape.
Figure 8.8 Orientation of known broch entrances in Orkney in comparison with the position of sunrise during the year. The red lines represent the frequency and direction of entrance orientations ($E = 10$; $SE = 7$; $ENE = 2$; $SSE, S, W & NW = 1$ data from Crowther 2011) Sunrise data, for 21st of each month from sollumis.com

A focus upon the ways in which the sights, sounds, smells and textures of the landscape are experienced has also highlighted the ways in which human landscapes are culturally defined. Rather than absolute, essentialist concepts, ideas of cultivated, hill, sea etc. reflect places in the landscape which are defined and understood by drawing on a cultural knowledge. Such
differences have of course been recognized in both modern and historical ethnographic and anthropological work (e.g. Gray 1999; Ingold 2000; Ingold 2004; Lee 2007) but in the changing ways in which people in later prehistory were structuring their world, it is also possible to identify changes in the perception of these landscapes. Whilst patterns of environmental change, notably an increase in the development of heathland, phases of increased wetness and a small decline in average temperatures (Davies et al. 2003; Blundell & Barber 2005; Farrell 2009; Charman 2010) can be identified during the first millennium BC and were undoubtedly of significance during the period, it is difficult to identify the degree to which this would have been recognised by people in the context of daily and seasonal cycles and over the course of their lives. It is only through larger timescales that these changes are identifiable, and in general we can assume that the rates of change were not so rapid as to fundamentally alter landscapes within the span of a single generation. Although evidence for the management of developing heathland in Orkney during the Iron Age (Farrell 2009, 377-378) suggests new landscapes were developing and being utilised and understood, I would argue that the landscape familiar to an Iron Age person would have been in essence the same as the landscape familiar to their parents. Areas of heathland, arable fields, pasture, sea, lochs and pockets of scrub/woodland would have all been common throughout the first millennium, although the locations and extents of these different areas would of course have altered. As such although we can consider the physical landscapes of Orkney during later prehistory to be broadly similar, the ways in which these landscapes were culturally understood and perceived can be seen to have changed.

The later Bronze Age landscape was, as discussed above, one in which different places were distributed around the landscape and were presumably connected through a network of paths. Separate places appear to have been closely related to individual practices, and these practices would, alongside the natural and architectural features, have contributed to the
creation of distinct senses of place. Thus the hot, wet, smoky processes undertaken at burnt mounds would have been combined with the low-lying, boggy areas in which these sites were located; the annual cycle of careful tilling, sowing and harvesting of crops would have been concomitant with the small enclosures on the low-lying hills; and the experiences of moving through heather, heath and peat, presumably whilst tending to livestock would have been associated with the steeply sloping spaces defined by the cross-contour dykes. These diverse places represent constituent parts of larger scale landscapes structured according to a cosmological grid, in which a north-south/up-down linearity reflected a sacred axis that was bisected by a horizontal, east-west path of the living (Downes & Thomas 2013). The relative positions of these places, and indeed the axes themselves were not absolute concepts, but are reflective of a concern with common orientations and linearity that has been recognized in the Bronze Age across Europe (Johnston 2005a; Field 2008, 199; Fleming 2008, 196-199). As such people living in Bronze Age Orkney would have been familiar with large areas of landscape (in excess of 100 hectares) within which they would have moved as part of daily and annual cycles, encountering different people and undertaking different practices, in distinct places within the landscape.

This sits in clear contrast to the extent and nature of the day-to-day landscapes of the Middle Iron Age described in the preceding chapters. Given the comparative absence of features within the landscape it is difficult to ascertain exact areas but based on the use of natural features in defining these territories a range of between c.30 (Knowe of Grugar) and c.90 (Westness) hectares is proposed. Environmental evidence from excavated sites demonstrates that although a variety of wild and domestic places were exploited, the plants and animals acquired from them may well have been subject to certain taboos or different treatment (Parker Pearson & Sharples 1999, 46-47; Campbell 2000; Mulville & Thoms 2005; Dobney &

4 For comparison the average size of a farm in Orkney in 2012 was 45.5 hectares (RESAS 2013, Table C4)
Ervynck 2007; Mulville 2008, 231-234) and the separation suggested by the use of natural and physical features such as the Stinkna Geo dyke at Borwick (Chapter 6) implies that places ‘inside’ and ‘outside’ were also used and understood in different ways. Thus a broader variety of daily and annual activities; the cycles of cultivation that would have brought people in contact with the soils and crops; the hot and dirty small-scale industrial production of pottery and metalwork; and the careful crafting of bone artefacts and textiles would have all been undertaken in or close by the broch settlement, whilst a more limited range of tasks focused on hunting and gathering wild resources would have involved moving around the more distant areas of heathland, hills and sea. The spatial arrangement of these Iron Age landscapes therefore positions the house as a central place, with other places conceptually positioned in relation to it, closer or further depending not solely on physical distance but also on the ways in which these places were ordered into cosmological models. The Scandinavian concepts of *innmark* and *utmark* provide a useful way of considering how these different elements of the landscape were conceived. Broadly these two terms refer to infield (*innmark*) and the outfield (*utmark*) however the terms are primarily cultural concepts (Diinhoff 2005, 109) referring not simply to a physical space, but also the resources, practices and attitudes (see Table 8.1). Indeed both uncultivated land and the sea are generally considered part of the *utmark* (Bertelsen 2005).

<table>
<thead>
<tr>
<th>Innmark</th>
<th>Utmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farming</td>
<td>Hunting</td>
</tr>
<tr>
<td>Collective tasks</td>
<td>Individual tasks</td>
</tr>
<tr>
<td>Civilised</td>
<td>Wild</td>
</tr>
<tr>
<td>Sedentary</td>
<td>Mobile</td>
</tr>
<tr>
<td>Friendly</td>
<td>Hostile</td>
</tr>
<tr>
<td>‘ancestors’</td>
<td>Trolls &amp; other dangerous beings</td>
</tr>
</tbody>
</table>

*Table 8.1 Traditional opinions about infield/outfield in Norway (after Holm 2002, fig 1)*

Thus the well-defined, cultivated places closely associated with the broch and its sense of belonging can be seen in terms of *innmark*, and although beyond the ‘pale’ the hill-land and
the marine environment are not simply marginal to this; with their emphasis upon the
collection of wild resources and a comparative lack of architectural structuring, these are in
keeping with the concept of utmark, and as such are conceptualised into a larger world view.
These are of course comparatively recent and geographically specific concepts (Øye 2005, 10)
and I am not suggesting they can be simply mapped of onto the Middle Iron Age of Orkney,
however it does help to illustrate the ways in which similar physical landscapes were used and
understood at different times during the later prehistoric period.

8.5 CONCLUSIONS

The research presented in the preceding field-based case-studies aimed to apply a suite of
quantitative and qualitative landscape archaeology techniques to the later prehistoric
landscapes of Orkney. Central to the successful identification of changing patterns in the
structuring and perception of the landscape was the emphasis placed upon the human
experience. There is a clear sense of both the relationships between people and the world, and
between individual social groups changing over the course of the first millennium BC.
Landscape tenure becomes increasingly clearly expressed during the Iron Age, with a greater
investment in the land in terms of anthropogenically enhanced soils and also the identification
of distinct spaces in the landscape associated with individual groups. The identification of
these areas of soil has been particularly significant, and by considering them from a human
perspective rather than as a purely economic resource the potential for these soils to act as a
form of social memory can be recognized. By also considering the practices which would have
formed these soils and other elements within the later prehistoric landscape it becomes
possible to think about the role that these primarily agricultural practices would have played in
forming and reworking elements of individual and group identity. There is then a growing
sense of permanence and belonging to a place during the Iron Age, which contrasts with the
more extensive and somewhat peripatetic use of the landscape during the Later Bronze Age.
The closer ties between distinct communities and distinct places in the landscape would have offered the increased potential for social tensions and internal conflict between groups, with an increasing emphasis being placed on the role of the house as a focus for a sense of belonging. As such the brochs and roundhouses of Iron Age Orkney would have represented the centre of individual worlds, both in terms of the relationships with other social groups and between people and the physical world in which they dwelt. A cosmological model is therefore suggested in which the world was structured in relation to the roundhouse, with efforts made to position the settlements in spatially well-defined locations which were both liminal and central in relationship to the different areas of the surrounding landscape, and which favoured a south-easterly orientation. The latter factor supports the role of the sun as an element of this Iron Age cosmology, suggesting a particular importance was placed upon sunrise during the winter months perhaps related to the turning of the year and the beginning of a new agricultural year. There are very clearly elements of this cultural knowledge which can be seen consistently across Orkney and further afield, however there is also evidence of considerable variation at both a regional scale and also between individual social groups and in the next chapter I will go on to consider these issues and ask how typical Orkney is of the Iron Age elsewhere.
9 CHAPTER NINE: PEOPLE IN THE WORLD IN ATLANTIC SCOTLAND

In the previous chapter I explored the ways in which a focus upon the human experience of later prehistoric landscapes in Orkney could help to illuminate the relationships between people and the world in which they dwelt. This second discussion chapter will go on to address this in further detail and relate it to contemporary dwelling practices further afield in Atlantic Scotland and beyond, in an effort to consider how typical the relationships between people and place were in Orkney during the first millennium BC.

9.1 STRUCTURING SPACE

9.1.1 SETTING SITES IN THEIR LANDSCAPE

As outlined in the preceding chapter the use of space in Orkney clearly changed over the course of the first millennium, shifting from an extensive utilization in which different parts of the landscape with distinctive characteristics were associated with discrete locations and practices, to the more tightly defined and intensively focused structuring and use of space associated with broch settlements. Bronze Age and Iron Age practices were situated within the landscape in different ways, drawing on the natural landforms of the places in which people lived. There is considerable variation in geology and topography across Atlantic Scotland as a whole, and as such we should expect to see people drawing on the environments in which they dwelt in different ways, but of course what is of interest is the identification of similarities and differences in the underlying ways in which the landscape was understood and organized.
Chapter Nine: People in the World in Atlantic Scotland

The extensive structuring of space noted in the Later Bronze Age landscapes of Orkney can also be identified elsewhere in Atlantic Scotland. In Shetland, walkover surveys of South Nesting (Dockrill et al. 1998; O'Connor 1998) and Burra (Hedges 1984; 1986) illustrate the ways in which the location of different elements – houses, cairns, burnt mounds and boundaries – can be seen to draw upon the natural topography and features of the island’s landscape. In common with Orkney burnt mounds are almost always located close to, but not on, cultivable land, with environmental evidence suggesting that they had been constructed on rather wet areas of pasture or former pasture (Hedges 1984, 49; O'Connor 1998). The location of settlement and field systems is more diverse than in Orkney, and is likely related to the more varied geology and topography of Shetland. On the long thin island of West Burra houses are generally located on the more sheltered east coast with good access to the sea as well as good agricultural land at the base of the hills (Hedges 1984, 47). In contrast the houses recorded as part of survey work in South Nesting were more commonly located in hillier areas, generally on low hills, knolls or hillside terraces (Dockrill et al. 1998, 74-80). More fertile areas, such as South Nesting, in both Orkney and Shetland have of course been subject to more intensive cultivation and settlement, and as such there remains the possibility for other lower lying settlement to be obscured or destroyed.

A similar degree of diverse and extensive dwelling also appears to be common in Northern mainland Scotland. So-called hutcircle settlements are frequently found, and although this class of monument has been shown to both pre- and post-date the later prehistoric period a significant number of these settlement groups do relate to the Late Bronze Age – Early Iron Age such as Kilphedir (Fairhurst & Taylor 1971) and Loch Shurrey (MacLaren 2003). Only a handful of burnt mounds have been excavated and dated, although many more have been recognised through field survey, and at both Lairg and Kilearnan Hill burnt mounds are located on sloping hillsides, away from the broadly contemporary neighbouring hutcircles (McCullagh
& Tipping 1998, 115; McIntyre 1998). The location of burnt mounds on often fairly steep hillsides, unlike the low-lying boggy locations of such features in Orkney and Shetland is likely a local response to the greater relief of the topography of Sutherland, but as in other parts of Atlantic Scotland there was a clear desire to separate the activities undertaken at these sites from many other day-to-day practices.

In contrast the Later Bronze Age landscapes of the Western Isles appear somewhat different. Settlement from the period in the Outer Hebrides remains comparatively elusive, and the small number of sites limits our understanding of Late Bronze Age – Early Iron Age settlement distribution. In topographic terms the Western Isles can be broadly split longitudinally into three (see Figure 9.1), to the east is hilly and rocky, with a large number of sea lochs, the middle zone is an area of shallow peat soils interspersed with small freshwater lochs known as the ‘Blacklands’, whilst to the west are the dunes and the fertile but unstable machair plains fronted by shallow coastal shelf, and it is in the latter area that settlement appears to have been focused (Armit 1996, 27-30; Parker Pearson et al. 2004, 9; Parker Pearson & Smith 2012, 2-3). This is most clearly illustrated in South Uist where the extensive survey undertaken as part of the SEARCH project has located eleven Late Bronze Age settlement mounds in the machair which apparently perpetuate earlier prehistoric settlement distributions (Parker Pearson et al. 2004, 61). This picture is however complicated. Much of the recent survey work has focused on the west coast, with minimal investigation on the hillier east coast, and without more comprehensive surveys of the interior and east coast there remains the potential for a biased view of a settlement distribution dominated by the machair landscapes of west coast to be perpetuated (Rennell 2009, 280-281). There is indeed limited evidence for prehistoric activity during this period in other parts of the landscape (Gilmour 2002; Grahame 2012) with examples of domestic sites such as Eilean Olabhat (Armit et al. 2008) located away from the machair. The evidence for non-domestic sites is similarly sparse. Burnt mounds are in
comparison to other parts of Atlantic Scotland extremely rare; the only excavated example, Ceann nan Clachan, may have been built in an area of damp pastureland (Armit & Braby 2002), and the handful of other sites seem to be broadly associated with lochs rather than the machair. Some ephemeral evidence of non-domestic activity has also been identified, that is associated with machair, at Barvas, Lewis (Macleod & Cowie forthcoming) suggesting non-domestic practices may have been more widely distributed around the landscape, rather than being limited to marginal areas.

Figure 9.1 Two views looking west across North Uist illustrate the variations in topography and environment of the Western Isles (Left: Newton, Right: Vallay ©RCAHMS images SC1013963 & DP111309).

There does not then seem to be the same extensive distribution of practices in the Late Bronze Age – Early Iron Age landscapes of the Western Isles, as has been identified in other parts of Atlantic Scotland. However such an interpretation remains somewhat cautious given the bias of survey work to date, and also the small but growing body of evidence suggesting the
presence of activities in more marginal areas of the landscape, some at least which appear to have been seasonally occupied. More fundamentally different is the development of apparent settlement mounds which continue earlier prehistoric patterns of settlement distribution. Unlike the Late Bronze Age patterns of hut circle settlement elsewhere in the region which shifted in and out of use on perhaps generational timescales; these settlement mounds suggest a much greater commitment to, and development of, a sense of place, extending over multiple generations of reuse and rebuilding on the same spot. I would suggest therefore that whilst many of the places and spaces created by people during the Late Bronze Age – Early Iron Age in Atlantic Scotland were comparatively short-lived, in the Western Isles there was a greater sense of commitment to both time and place, in the ways in which day-to-day practices and dwelling were conceptualised.

As such it is somewhat surprising to see this well-established pattern of settlement and attitudes to space and place change in the Western Isles during the Middle Iron Age. On the basis of extensive survey evidence the appearance of brochs relates to a significant reorganization of the landscape of South Uist, in which settlements were established at regular intervals along the machair (Parker Pearson et al. 2004, 102), and a similar pattern is also visible in North Uist with a strong focus upon coastal locations (Armit 1992, 110-113) although the density of broch settlement is much higher in the latter island, suggesting differences in the nature of land-holding (Armit 2002, 25). On both islands a broadly similar relationship between different places within the landscape and the different settlements is strikingly similar, with the broch settlements generally placed on or close to freshwater lochs in areas of grazing, whilst wheelhouses were predominantly located in the machair itself (Armit 1992, 113; Parker Pearson 2012b, 414). Such a distribution seems to have been organised in order to establish a series of ‘territories’ which run roughly east-west across the islands, allowing broadly equal access to different landscape niches and resources, implying a different model of
Chapter Nine: People in the World in Atlantic Scotland


In keeping with the conclusions drawn from the fieldwork undertaken in the two case-study areas (see Chapter 5) a concern with positioning Middle Iron Age settlements so as to provide each settlement access to a variety of different types of place within the landscape seems to be a common concern across much of Atlantic Scotland. This generally represents a departure from earlier settlement patterns. The exceptions are some areas of Caithness and Sutherland, where there is a strong trend of episodic occupation of the same areas of the landscape (Cowley 1998; 2005; Baines 1999; 2004). The environmental evidence suggests that Middle Iron Age sites exploited the full range of these different resources and landscape areas (e.g. Bond et al. 2005; Ceron-Carrasco et al. 2005; Dockrill & Bond 2009), and as such this broad utilization of the landscape tied to the apparent creation of territories implies a change in the ways in which rights of access and use were negotiated and agreed, and also a change in the relationships between people and the natural landscape.

In all of the areas of Atlantic Scotland there are of course individual brochs that do not follow this broad model of access to all the different available landscape niches. The distribution of sites in the more topographically fragmented island of Barra lacks the coastal dominance noted in other parts of the Western Isles, and there is a greater variation in the quality and variety of available land and resource access (Armit 1992, 110-124). Similarly Fojut (Fojut 1982, 48-52) identifies sixteen brochs in Shetland with poor access to two or more of what he regards as the three key resources (arable, pastoral and marine). However as he points out some of these sites such as the Loch of Houlland (Figure 9.2) may have also utilized other resources such as birds nesting on the nearby cliffs, or indeed the loch on which it is positioned. We must also take care in making assumptions based on particular landscape
scales, particularly those provided by modern landuse and, geological and pedological mapping.

Figure 9.2 Loch of Houlland broch, Esha Ness, Shetland (©RCAHMS image SC504036)

Functional and GIS analysis of brochs in Shetland and Orkney has identified a clear correlation between the location of brochs and the presence of areas of arable soil, and in doing so has also identified a number of brochs which differ from this trend (see Fojut 1982; Rahn 2007; Turner 2012). One such anomalous site is the Broch of Borwick, which Rahn (2007, 203) identified as lacking an associated area of fertile soil. However the geophysical survey of the surrounding area (see Chapter 6) illustrated clearly the small but highly enhanced area of soil which would have provided a means of cultivating arable and other crops. Similarly in Shetland soils are generally so poor that the best quality soil is to a great extent anthropogenic (Fojut 1982, 42). An example of this is provided by the multi-period landscape at Underhoull, Unst in which deposits of up to 1.15m in depth were recorded (Thomas et al. 2007, 88-89) and, whilst
the dating of the different deposits is uncertain and the sequence complex, a small (>1 ha) area of heavily modified arable soil was identified, apparently contained within a curving earthwork boundary associated with the broch, beyond which micro-morphological evidence suggests the surrounding land had been stripped of all vegetation (Turner 2012, 437-460). There were undoubtedly some brochs that had better or worse access to particular individual resources and landscape niches. But rather than considering these settlements as more or less marginal we should be aware both of the potential for economic diversification and specialization, and also to take care when identifying the resources which people would have been able to access. Helen Smith (1994, 174) raises the question as to why Iron Age sites in the Western Isles are so focused upon the machair areas, rather than in the more fertile and stable, but more labour-intensive blacklands, and goes on to suggest that people may have been more concerned with the ease of cultivation rather than the reliability of yields. Such observations provide a salient reminder that we are not dealing with groups of people struggling every year to survive, but rather with communities who are making informed decisions about the economic and subsistence strategies that they were choosing to undertake, as well as the particular parts of the landscape that they were choosing to live and work in.

Although much of the variation in the location of brochs between different areas of Atlantic Scotland can be seen to be related to the differences in geology and topography, there are some locations in which there are similarities between island groups, and this is well illustrated in the south of Shetland, notably the so-called Shetland ‘breadbasket’. There are clear similarities in the landscape around the brochs at the most southerly tip of Shetland – Jarlshof, Old Scatness, Eastshore and Toab – with that of large parts of Orkney and as such it is perhaps not surprising that the relationships between the brochs (and other sites), the different landscape niches that would have been accessible, and the recognition of potential broch
territories (Fojut 1982; Turner & Dockrill 2005) in both areas are strikingly similar. The position of Scalloway broch (Figure 9.3), on the end of a low ridge, also shares a similar setting to many of the Orcadian brochs discussed, with fertile soils, hill-land and the sea all nearby (Sharples 1998, 1-9), and the ridges of hills to the east and west would also have served to create a sense of bounding similar to that recognised in the broch locations studied in Orkney (see Chapter 7).

Figure 9.3 Scalloway, at the southern end of the rich agricultural land of the Tingwall valley, Shetland (©RCAHMS image DP081222) The location of the broch excavated in 1989-90 is highlighted with an arrow.

The detailed examples presented in the preceding fieldwork and the above discussion has shown the settings in which brochs were being constructed to have been quite distinct.
Although there is variation in the places within the landscapes that the complex architectural dwellings are being constructed, it has been possible to ascertain a number of factors that were apparently important in the considerations of builders when identifying the site upon which to build. There was undoubtedly a strong desire to be close to water, most often the sea, but also making use of numerous freshwater lochs. There was also a strong tendency for settlement to be located as centrally as possible within an area of landscape, so that a wide variety of different resources and environmental niches were within easy reach. Another common theme were the ways in which settlements were positioned in order to create visually defined and bounded places or territories. This phenomenon has been clearly identified in the Western Isles (Rennell 2009; 2010) and to a lesser degree at individual sites in Shetland and Northern Scotland. In Orkney the experiential focus of the current research (see Chapter 7) has illustrated the ways in which brochs were positioned within the landscape to create distinct and defined places, with a strong south-easterly alignment. Such settings for individual and clusters of brochs were only possible because of the character and form of the topography and geology of Orkney. But to achieve these settings required the conscious consideration of such landforms and the careful positioning of sites within the landscape. There is clearly variance in the landforms of the region, and in the settings of individual later prehistoric settlements, but across Atlantic Scotland similarities in the underlying choices being made by communities in determining where it was appropriate to build a dwelling can be recognised. There are some clear sub-regional variations, notably the break in settlement patterns in the Western Isles seen with the emergence of broch settlements and the differences between upland and lowland areas of Northern Scotland, and whilst these can been interpreted as responses to the local environment, they are also responses that have been consciously made by communities. The different factors – relationship to water, access to different types of landscape, visual bounding – can all be considered parts of a package of
decisions and considerations that would have been required to determine the best, or most auspicious, location in which to build.

### 9.1.2 **BOUNDARIES IN THE FIRST MILLENNIUM**

During the Bronze Age and Early Iron Age two types of boundary feature, apparently contemporary with roundhouse or hutcircle settlements, can be recognised. Throughout Shetland and Northern Scotland small often aggregated enclosures, similar to those at the Peerie Hill (Chapter 6) have been recorded. These ‘fields’ are generally small (in the order of 1000-2000 sq. m), irregular in shape and often make use of natural features such as coastline or breaks of slope to complete and visually enhance boundaries (Barber & Brown 1984; Hedges 1984; 1986; Dockrill et al. 1998; ScARF. 2012c). A second group are less commonly identified, but examples of long, cross-contour dykes, which appear at least on first inspection to be similar to the coaxial boundaries found on Dartmoor (Fleming 2008), were identified in the West Burra survey (see Figure 9.5) and at the Peerie Hill, Orkney (see Chapter 6). The West Burra dykes were interpreted as partitioning the island into distinct territories (Hedges 1984, 55), a role that has also been suggested for the massive treb dykes found in Orkney (Lamb 1983) although these treb dykes are substantially bigger than the West Burra and Peerie Hill dykes. The dating of the treb dykes remains uncertain, and as has been suggested in the discussion of the large dyke at Borwick (see Chapter 6) at least some of these boundaries may date to the Iron Age rather than the Bronze Age.

The boundaries of many of these prehistoric enclosures are, when examined in detail, extremely fragmentary and often rather than being unitary and coherent monuments have developed over considerable periods of time. The dykes excavated at the Allt na Fearna quarry at Lairg were in their main phase contemporary with a series of hut circles, with both dwellings and boundaries dated to the second half of the second millennium BC. Several of the boundary
features began to develop during the later Neolithic, gradually accumulating through a combination of stone clearance, dumping of midden and the formation of lynchets (McCullagh & Tipping 1998, 77-84). A similar phenomenon is also recorded at Kilphedir, Sutherland where a number of probably Middle Iron Age cultivation plots are defined by linear clearance cairns (Fairhurst & Taylor 1971, 88).

Figure 9.4 Excavation at Allt na Fearna quarry, Lairg (McCullagh 1993, fig 2) There is evidence of non-continuous cultivation and inhabitation during the 4th and 3rd millennium. The majority of activity in the area dates to the second half of the second millennium BC, and then the location appears to have been abandoned until the roundhouse (Site 0504) was occupied sometime during the 5th - 1st centuries BC.
Figure 9.5 The Bronze Age landscape at Tougs, West Burra, Shetland (adapted from Hedges 1986, fig 1)

Many of the boundaries in Northern Scotland developed over often considerable periods of time, reflecting the episodic nature of much of the settlement and cultivation undertaken in these areas. They lack a planned or coherent design and would, throughout prehistory, have been continuously in the process of construction and development. Contemporary boundaries in Orkney are, as discussed in the preceding chapters, relatively rare; the complex of features on and around the Peerie Hill (see Chapter 6) being some of the most extensive recorded within the archipelago. These boundaries, with regularly spaced orthostats, appear to have
been more coherently planned, but they are much less substantial, lacking the large accumulations of stone seen in the previously described dykes from Northern Scotland. Two possibilities exist; either that these features only ever served to demarcate the edges of space rather than to provide a physical barrier, or they provided the basis for a more substantial turf or earth element to the dyke. Such a building technique has a long history in Orkney (Fenton 1997, 89-100) and the latter interpretation is favoured in relation to these later prehistoric enclosures. Such boundaries are as such somewhat more planned, but the nature of turf dykes is such that they would require regular maintenance and rebuilding (Ibid.) and such seasonally repeated practices would serve to reinforce a sense of repeated making and remaking of these physical and conceptual boundaries. Although the acts of construction themselves are somewhat different, in both cases we can see spaces that would have been remade through acts of repairing and adding material to boundary features, which may have been previously abandoned and unused, coming in and out of use and significance on perhaps a generational timescale.

In contrast to these physical features which seem to have only intermittently been used and understood as a means of defining a series of spaces, the boundaries of the Middle Iron Age can be seen in very different terms. There is a very clear shift from these boundary features which were developed, abandoned and reworked over considerable periods of time, to the more architecturally complex and significantly more permanent boundaries associated with the Middle Iron Age. These boundaries – dykes, multivallate enclosures, and the broch walls themselves – all demonstrate a clearer sense of intent. They were conceptualised and built as a means of establishing particular places within the landscape, and to provide a means of controlling and organising spaces, which in turn provide the means to maintain and reiterate relationships with other groups. As such whilst the substantial and permanent nature of these boundaries remains fairly consistent across the region, we might expect the form and position
of these boundaries to change depending on the potential relationships between the inhabitants of a broch and the world – both physical and social – in which they dwelt.

![Figure 9.6 Tumblin broch, West Mainland, Shetland (adapted from Turner 2012, fig 3.14b)](image)

Boundary features are shown in red, contours in black. The long sinuous boundaries to the west of the broch have been tentatively identified as Iron Age whilst the small sub-circular features to the north are more modern sheepfolds.

The ways in which these multiple substantial boundaries created a depth of space, progressively further (or closer depending on an individual’s status as an insider or outsider) from the centre of the settlement has been discussed in detail in the preceding chapter. What
becomes clear when reconsidering the landscapes of brochs within Atlantic Scotland is that there are different ways in which this depth of space was established. Four boundaries similar to that identified to the north of the Broch of Borwick have also been recognised in Shetland (Turner 2012, 97-103). These boundaries appear to create considerably smaller ‘territories’ than the visual and spatial definition identified in Orkney, being generally much closer to the settlement, and in two examples (Saebreck and Tumblin) the spatial, and particularly vertical, ordering is reversed with the broch in both cases being positioned on the summit of a hill, whilst the boundary follows the contours further downslope (see Figure 9.6). Although in typological terms there are differences between the various boundaries identified in Orkney and Shetland they would have created a similar sense of depth of space around each settlement, with an outer boundary to be physically and socially negotiated before moving closer to the heart of the place. The differences arguably stem from the differences in landscape form and location in which each of these brochs was built; the brochs at Tumblin and Sae Breck are both located in more hilly, upland areas, whilst Clevigarth, where the boundary is located uphill from the broch, is in a lower lying area, similar to the setting of Orcadian brochs such as the Broch of Borwick or Loupandessness (see Chapter 7). The variation in the form, shape and relationships between features in the landscape can be seen as conscious decisions made in response to the particular character of the part of the landscape in which these people have chosen to construct their homes. But at each of these sites, it is possible to identify a similar desire to emphatically define a space which is intimately associated with the broch settlement, and which I would argue was integral in the creation of a sense of place and belonging for the inhabitants.

9.1.3 STRUCTURING RELATIONSHIPS

Through a consideration of the active role that the landscape played in the lives of the later prehistoric inhabitants of Atlantic Scotland, it is possible to identify similarities and variance in
the ways in which people organized their worlds. These differences and parallels can be recognized at a variety of different scales, from the individual community through to pan-regional traits common across the whole of Atlantic Scotland and indeed further afield, and we can also see that they change over time. Underneath such variation there are common concerns being expressed, and I would suggest that these relate to broader shared cultural and cosmological ideas that people used as a means of structuring their relationships with the world in which they lived during the Later Bronze Age and Iron Age.

Figure 9.7 Burrafirth, Unst, Shetland (©RCAHMS SC860540) The broch is situated at the southern end of a narrow inlet overlooking a large sandy bay, and is visually isolated from other brochs on Unst by ridges, reaching more than 100m to both the east and west.
In all of the regions of Atlantic Scotland it is possible to identify areas, such as Eynhallow Sound in Orkney, or the southern Mainland of Shetland, in which brochs are more closely clustered together. It is equally possible to identify brochs which are located in pairs, and indeed visually and spatially isolated brochs such as the Broch of Borwick, Orkney or Burrafirth, Unst (Figure 9.7). Each of these three distributions – isolated, paired and clustered – represents a different set of social strategies for the inhabitants of these brochs. These would have required different degrees of social interaction and negotiation between neighbours, and the evidence provided from geophysical survey, earthwork recording, and environmental evidence, suggests this would have been linked to agricultural or economic specialization at different settlements. This social interaction would have been undertaken on differing timescales over the year, perhaps with communal work when new structures were being built, or during harvest times, and of course different agricultural strategies would have resulted in different periods of the year being important to different groups.

This variation in social relationships would appear to be common across the whole of the region, but there are also very clearly differences in the ways in which people constructed relationships that were distinct to individual areas and island groups. Thus the presence of broch villages in Orkney, Shetland and northern Caithness, is very different to the relationships that must have existed between the inhabitants of brochs and wheelhouses in the Western Isles, and indeed between the residents of the hutcircles and brochs of upland Caithness and Sutherland. These differences suggest regional trends in the ways in which people chose to live during the Middle Iron Age, and it seems likely that they also reflect the variations in the patterns of dwelling that existed during the Late Bronze Age. However such considerations perpetuate the idea of the landscape itself as something of a passive backdrop. The distinct and varied landscapes in which brochs, wheelhouses, broch villages and hutcircles were built would have each necessitated individual adaptations that represent choices made by the
builders of these settlements. We can also see that although typologically similar the experience of dwelling would have been very different. Thus for example the wheelhouses of Shetland were often built into the shells of existing brochs, and although typologically similar to the wheelhouses of the Western Isles, the experience of inhabiting these structures and the landscapes in which they were built – the latter a subterranean space carefully constructed in the mobile and dynamic machair, the former tailored to fit inside the shell of a building that had already stood for multiple generations in a rugged and maritime dominated landscape – would have been very different. In her consideration of the dwelling experience of a variety of Iron Age sites in the Western Isles Rebecca Rennell (Rennell 2009, 277-278) identified four distinct types of place: lowland coastal, islet, upland and coastal headland, all of which were associated with monumental roundhouses, and although occupied by typologically similar structures each would have had a distinct experience of place and dwelling. Similar typological problems are highlighted by classifications of the many islet sites, variously as crannogs, island duns or fortified islands, terms which belie the underlying conceptual desire of the inhabitants to live on the water (Lenfert 2013). The current research builds on these ideas, and further explores the importance of the human experience of these embodied landscapes, as a means of thinking about the ways in which people organised and understood the worlds in which they lived.

9.2 WAYS OF CREATING PLACE

9.2.1 AGRICULTURE AND OTHER PRACTICES

As explored in the preceding chapters there is an intimate relationship between the ways in which people physically and mentally create places in the landscapes and the identities that are developed through particular practices. Agricultural practices clearly dominated many aspects of the lives of the vast majority of people during later prehistory, and there is also
clear evidence of a wide range of other activities being undertaken, some of which appear to have been quite clearly separated out into different parts of the landscape.

In significant parts of Orkney and to a slightly lesser extent Shetland, arable cultivation played a particularly important role, both economically, and also socially. Pedological evidence suggests that at both Jarlshof and Old Scatness the production of arable crops was based upon small ‘infield’ areas of anthropogenically enhanced soils which would have been intensively worked (Guttmann et al. 2006; 2008; Dockrill & Bond 2009). In common with similar soils found in Orkney these were often developed above existing Neolithic and Bronze Age soils, but this does not represent a simple persistence of practice; in many cases there are examples of apparent hiatus or instances of sand blow burying cultivation surfaces. The nature of these soils as an ancestral resource will be discussed in more detail below, but such intensive cultivation practices would have also necessitated spending considerable time in this space, undertaking a seasonal round of repetitive practices of manuring and tilling the soil, sowing seed, weeding and harvesting. As such the area of the world given over to the production of these important arable crops would have developed a distinct sense of place; familiar because of the time spent there and significant because of both the cosmological and economic importance of agriculture.

Of course as has already been discussed above, not all settlements in Atlantic Scotland appear to have been as strongly focused on the production of arable crops, and indeed the environmental evidence from excavated sites does indicate that a mixed agricultural and economic strategy was the norm during later prehistory. Clearly then at least some members of almost every community would have been involved in other agricultural practices which would have taken them into different parts of the landscape, and likely encountering other people, animals and places. Such practices would have taken people somewhat further from
the home, perhaps up into areas of hill-land for seasonal grazing or gathering of fuel, or indeed out to sea to fish. Such places would be further from the home, but to varying degrees still very much part of the day-to-day worlds of these people in which people would have dwelt. The role that these agricultural practices played in the ways in which groups and individuals identified themselves, and were identified by others has been discussed in detail in the preceding chapter. We cannot of course be sure about the degree of agricultural specialization or responsibility taken by individual members of these communities. It seems likely that for some time-dependent tasks such as harvesting arable crops the whole community, possibly with additional help from other outsiders, would have worked together, whilst for other elements of the agricultural cycle only small sub-sets or even individuals within the community may have undertaken certain jobs.

Certain tasks, notably those involving extremes of heat, such as metalworking and pottery production, appear to have been separated out into different parts of the landscape. Whilst this would have served a practical purpose in reducing the risks of fire and pollution, this can also be understood in symbolic terms (Budd & Taylor 1995; Gansum 2004; Haaland 2004) and the location of such practices in distinct parts of the landscape would have, in turn, impacted the identities of the people undertaking such work, and their relationships with other people. A number of non-domestic industrial sites have been identified across Atlantic Scotland, and often appear to be located in ‘different’ places in the landscape. The Late Bronze Age- Early Iron Age site at Gob Eirer, Lewis, is located on a small promontory and provides evidence of small-scale pottery production and possibly leather working (Nesbitt et al. 2011). The metal-working site at the Knowe o’ Skea, Westray (Moore & Wilson 2006) is located in a similar promontory location (Figure 9.8), whilst the subterranean chamber and Late Iron Age smithy at Mine Howe, Mainland Orkney, would have been encircled by wet or boggy ground within a natural amphitheatre formed by higher ground (Card & Downes 2003, 18). All of these
landscape positions can be regarded as liminal, marginal or isolated and would, I suggest, imply an emphasis was being placed upon establishing distinct places within the landscape, in which activities were both physically and visually isolated from the rest of the day-to-day Iron Age world.

Figure 9.8 The later prehistoric cemetery and metalworking site on the Knowe of Skea, Westray (©RCAHMS DP068328)

Such a separation of metalworking from other dwellings and structures was common in much of Iron Age Britain (Giles 2007b, 399) although not all such sites were located quite so extremely. At Underhoull, Shetland, excavation revealed evidence of small-scale production of metalwork and pottery during the Middle Iron Age, located in fairly open working areas approximately 100m downhill from a substantial broch (Small 1967). Evidence for metalworking at broch sites themselves is comparatively limited; with the material from Howe,
Orkney, being the most compelling (McDonnell & Dockrill 2005, 208). Even at Howe iron-working seems to have been sporadic and inefficient in character and largely located in abandoned buildings (McDonnell 1994, 232), and in general iron-working associated with broch sites, such as Loch na Beirgh, Lewis (Heald 2001), and Scalloway, Shetland (Slater 1998), appears to be focused upon later Iron Age reuse of structures, rather than Middle Iron Age phases.

During the Middle Iron Age then the general trend appears to have been for practices which employed high temperatures to be distinct and separate from domestic spaces. Even when both domestic inhabitation and industrial activities were located within the same settlement, a degree of spatial and temporal separation appears to have been maintained. The processes of smelting and smithing are complex and require multiple stages, which would have relied upon careful timing, a detailed knowledge of materials and the assessment of temperature through flame colour, and such processes would have been both laborious and with the heat, noxious fumes and debris, physically dangerous (Hingley 1997, 10-12; Giles 2007b, 398-399). This complex process of transforming nodules of ore into shiny metal would also have been rich with metaphors of transformation, regeneration and fertility (Hingley 1997, 13-15; Gansum 2004; Haaland 2004; Hingley 2006; Giles 2007b, 401). These discrete locations within the landscape combined with the distinct skills, and danger (both practical and symbolic) of working with these materials, would I suggest have marked people undertaking these practices as different from the rest of the community, at the very least during periods of metalworking. Such places in the landscape may have been accessible only to certain people, or at certain points in time during the smelting or smithing processes, and the intensity of such experiences would have created a close connection between particular people and these places (see Relph 1976). Although we cannot of course be sure that the individuals in question were metalworkers, such connections between people and place are perhaps attested to by the
presence of a number of burials associated with metalworking sites. At Mine Howe, Orkney, industrial activity continued after the burial of an adult female under the floor of the ‘Smithy’ (Card et al. 2005a), whilst at High Pasture Cave, Skye, the remains of an adult female form part of the closing deposits at the site (Birch 2008). The presence of these two females also perhaps challenges the preconceptions of metalworking as a preserve of males (Budd & Taylor 1995, 137-138), and underlines the complex nature of the relationships between individuals, identities, metalworking practices, and distinct places in the Iron Age world.

### 9.2.2 Referencing the Past

The association of burials with these metalworking sites appears to have been comparatively rare and quite individualized. However there were other broader and more temporally distant associations between preceding generations and particular places in the landscape. Many of these appear to be concerned with establishing connections between past and present and this phenomena seems to have been a common theme in many parts of Atlantic Scotland during the Middle Iron Age, albeit constructed and expressed in different manners in different parts of the region, and perhaps by different social groups.

Perhaps the most visible example of the establishment of a connection with ancestral groups is visible in the reuse of Neolithic tombs during later prehistory. This reuse has been interpreted as an attempt by people to express the lineage of their identity through an association with the ancestors and appears to be distinct to Orkney and North Uist (Hingley 1996). However even within Orkney it is far from a universal practice; of the 80-90 Neolithic tombs in Orkney only six clear examples of Iron Age reuse provided the basis of Hingley’s (1996; 1999) research. This low proportion may well reflect the limited number of excavations of tombs in ‘broch-

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5 Davidson & Henshall’s (1989) inventory records 81, whilst the RCAHMS database identifies 92 examples to varying degrees of certainty.
type’ locations, as well as the tendency not to excavate brochs to destruction; furthermore the recent discovery of both Iron Age and Neolithic elements at the Knowe of Swandro (Dockrill & Bond 2013) has highlighted the problems of recognising Iron Age reuse of Neolithic sites without intrusive investigation. Whilst not representing a significant proportion of sites, other earlier prehistoric sites such as the Stones of Stenness also exhibit evidence for Iron Age activity (Ritchie 1976, 22) and the farmstead (phase 5) excavated at Pool, Sanday and dated to the latter part of the Middle Iron Age, also makes use of architectural elements of a long-lived Neolithic settlement (Hunter 2007). With the exception of Howe all of the examples of reuse recorded in Orkney are by either earlier Iron Age roundhouses, or non-broch settlements which lack the immediate influence of a broch. Even at Howe the phase 7 broch is reusing the remnants of a Neolithic tomb which had already been incorporated into the earlier phase 5 roundhouse several hundred years earlier (Ballin Smith 1994). There are then I would suggest two distinct traditions of building; with the groups who were reusing earlier monuments being distinct from those constructing massive, architecturally elaborate brochs. These two approaches would not only have created very different architectural spaces, but through the position in the world and the associations with earlier generations would have also developed distinct senses of place.

Another way in which people were establishing both a sense of place, and clear relationships with the past was through the creation and maintenance of the deep anthropogenic soils which have been located around a number of broch sites. As discussed in Chapter 6, the long-lived occupation of settlements and the utilization of discrete cultivation plots would have provided the conditions for the development of a long-lasting commitment to place. The process of manuring the fields and developing these soils would have involved the addition of much of the waste material from the settlement to the field soils, and scraps of pottery and bone would have been regularly encountered by people as they tilled the soils in subsequent
years. Some of these individual pieces of material culture may well have been recognizable to members of the community, and even if they were heavily damaged or abraded would still have provided a tangible reminder of the preceding years of cultivation and incorporation of domestic materials into the earth. Domestic materials apparently disposed of in structured deposits have been clearly shown to have played an important symbolic and cosmological role in the Iron Age (Hill 1995) and I would argue that the incorporation of similar materials into midden-enriched soils would have fulfilled a similar purpose. Ethnographic examples suggest considerable significance and ceremony can be attached to the processes of incorporating anthropogenic material into the soils, often as offerings to deities, in the form of ancestral or mother earth figures (Winiwarter & Blum 2006; Sampietro Vattuone et al. 2008; Wells & Mihok 2010). These midden enhanced soils have been recorded at a number of sites in Atlantic Scotland, particularly notably in Orkney and Shetland, and I would argue that they represent a form of material culture that in terms of both repeated acts of inscription and the symbolic value of the soil creates a strong sense of time and place.

These soils are not found at every Iron Age site in Atlantic Scotland, and in some locations where midden material has been recorded it has not been incorporated into enhanced soils, although was still invested with apparent significance. At Dun Vulan, South Uist, a mound of midden material reaching c. 1.50m in height developed southwards from the broch entrance (Parker Pearson & Sharples 1999, 97), accumulating as a result of periodic deposits primarily from floor and hearth sweepings (Ibid., 345), from the 1st – 4th centuries AD (Ibid., 129). The excavators suggest that these deposits represent a symbolic act of ‘planting the community in a rich compost of domestic rubbish’ (Ibid., 17), particularly as these deposits had a functional value as fertilizer. These deposits did not however include significant quantities of animal dung, and it would seem likely that domestic rubbish and animal waste were being treated differently, with the former perhaps retaining a more symbolic role. Indeed ethnographic
research in the Outer Hebrides has highlighted the value of using different types of fertilizer on different areas of the landscape, with seaweed being a more beneficial fertilizer for the machair, whilst dung was more commonly applied to the Blacklands (Smith 1994, 166-167). Another large mound of midden material developed at the non-broch site of Pool, Sanday during the Later Iron Age. Although lacking micro-morphological analysis of the constituent materials and formation processes, the presence of a possible tethering post and a considerable number of canine coprolites, together with the evidence for gradual development and accumulation of midden (Hunter 2007, 103) would suggest this large deposit represented a mound rather than an intensively cultivated plot. More significantly is the way in which the mound becomes progressively more formalized with the addition of revetment walls and a substantial area of paving surrounding the midden (Figure 9.9).

Figure 9.9 The walled and revetted mound of midden (Structure 24) at Pool, Sanday (Hunter 2007, illus 4.17)
These midden deposits and their associated structures are not therefore simply dumps of rubbish to be disposed of away from the settlement. These deposits, accumulating over many centuries would have created a very visual and olfactory reminder of the many generations of people who had dwelt within these settlements. The apparent selection of materials for inclusion seen at sites such as Dun Vulan and Old Scatness, alongside the visual, and in the case of Pool physical, demarcation of a space, would have contributed to a distinct sense of place within these settlements. Such places would have fulfilled both a practical role in the disposal of waste, but also a cosmological role in establishing a sense of time and belonging for the people who dwelt in these communities. Similar principles can also be identified more broadly during the later prehistoric period in Britain. Although the exact nature of the character and formation processes can be seen to differ (Waddington 2012), the midden mounds of Wessex such as East Chisenbury and Potterne represent similar practices of deliberate accumulation and curation of midden material (McOmish 1996), that underline the fundamental importance as well as the rich symbolism of fertility and reproduction that was attached to such material (Barrett 1989, 309-312; Brück 2006, 303-304).

Such acts of referencing and reusing ancestral materials have been recognised in a variety of other aspects of the Iron Age in Atlantic Scotland such as the reuse of Neolithic tombs (Hingley 1996; 2005) and the manufacture of artefacts such as spindle whorls from human bone (Shapland & Armit 2012). The location of human inhumations within buildings which continued to be used, such as the seated burial of an older, arthritic man beside the hearth of one of the extramural structures at Crosskirk, Caithness (Fairhurst 1984, 85-88), or the young female under the floor of the smithy at Mine Howe, Orkney (Card et al. 2005a), also suggest that efforts were made to retain and project an association with individual ancestors. The numbers of such activities are generally small and as such cannot be taken as a universal cultural practice, but when placed alongside a number of other practices, such as the accumulation of
soils, and the growing architectural permanence of settlements, they suggest there was a growing concern during the Middle Iron Age with establishing clear links with the past.

9.2.3 CREATING IDENTITIES

The undertaking of distinct processes and practices, such as arable cultivation and metalworking, in discrete parts of the landscape would have led to the reflexive development of a strong sense of place in, and identification with, certain parts of the world. Such places would have been even more firmly established in people’s minds through the establishment of a considerable depth of time and shared history (Tuan 1977, 183-185; Tilley 1999, 178-183), and it is particularly in this respect that it is possible to identify a clear shift in such attachment to place during the latter centuries of the first millennium BC. The hutcircles and roundhouses of the Late Bronze Age and Early Iron Age were comparatively impermanent, and both settlement and cultivation plots appear to have been frequently built, abandoned, reused and modified over hundreds of years. In contrast the acts of repairing and repeatedly rebuilding brochs are fundamentally different, representing a much greater commitment and connection to a place, and significantly the history of that place, by a group of people is also in evidence in the ways in which midden deposits were accumulated and curated over the lifetimes of these communities.

By moving beyond typologies and economic evidence, it is possible to question models of social hierarchy and structuralist oppositions in the Iron Age. In highlighting the importance of place, it is also possible to focus on the importance of the practices that created these places and how this establishment of place appears to have changed during the course of the first millennium BC. There was a growing concern with structuring and ordering practices in the landscape, establishing places that are associated with distinct and well-defined groups of people and their day-to-day lives. I would suggest that by the Middle Iron Age these
communities have become increasingly well-defined, both spatially and socially, in the creation of clear insiders and outsiders, each group maintaining a strong sense of tenure and belonging to particular parts of the world. The positioning of buildings and the experience of dwelling in these landscapes can be seen as part of a strategy to reinforce these local identities (see Rennell 2009, 293-294; 2010) as can the increasingly long-lived areas of dwelling and practice and the establishment of links with both the deep and more recent pasts. There was still a great diversity in how these identities and connections were established and maintained which implies considerable individual and community choice, indeed it may well have been important in defining oneself, to ensure a degree of difference from one’s neighbours or indeed people from further afield. This common desire to define insiders and outsiders, and community identities suggests that similar concerns were being felt across Atlantic Scotland, and indeed beyond, and that in the shared motifs and principles that they used to organize their landscapes, people were drawing from a broadly shared cosmological understanding of the world.

9.3 CONNECTIONS WITHIN AND BEYOND ATLANTIC SCOTLAND

It is a well-recognised truism that to understand the archaeology of Atlantic Scotland, and indeed Atlantic Europe, we need to think in terms of a geography in which travel by sea provided the primary routes of communication (see for example Armit 1996, 6-7; Henderson 2007, 1-7). Often such principles are obscured in the development of regional or local synthesis and research, both in terms of the wider connections within the region, and indeed the ways in which archipelagos and island groups may have been connected. An example of this is provided by the Nearest Neighbour Index values calculated for Shetland brochs by Noel
Fojut as part of his PhD research (Fojut 1980). These are flawed as they consider individual islands, rather than the relationships between brochs across bodies of water, although it should be noted that Fojut does consider visual relationships between islands separately.

![Map of brochs in Northern Shetland](image)

**Figure 9.10** Location and intervisibility of brochs in Northern Shetland (adapted from Fojut 1982, figures 1 and 2) The close visual inter-relationships of the brochs around Bluemull sound between Yell and Unst is clearly visible.

This problem is clearly illustrated if we consider the islands of Yell and Unst in Shetland (Figure 9.10). The Nearest Neighbour Index value calculated for Yell (1.387) suggests brochs were fairly evenly distributed, whilst the value for Unst (1.086) suggests a more random scatter of

\[ \text{The Nearest Neighbour Index provides a statistical assessment of clustering in distributions. Values vary from zero (sites clustered together) through to 2.1941 (sites spaced as far apart as possible) (Fojut 1982, 40-41)} \]
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sites (Foyut 1982, 41). These values however fail to recognise the concentration of brochs along the shore of Bluemull Sound between the two islands, and suggest that the brochs on the southwest coast of Unst had far closer relationships to those brochs on the northern end of Yell, than they did to other brochs on Unst. This focus of settlement upon the channels between two islands is similar to that seen around Eynhallow Sound in Orkney (see Chapter 5) suggesting that such bodies of water may have been particularly favoured for the location of broch settlements, and highlights the importance of maritime connections during the Iron Age.

Similar disparities in the distribution of brochs are visible in Orkney, for example the absence of brochs from Eday, and highlight the issues of utilising modern boundaries and regions when considering communities and connections in the past. Henderson’s (2007) proposal of a shared cultural grouping covering the Atlantic coast of Europe is contingent upon maritime trade and communication, and whilst as I have argued for the importance of the sea in the preceding chapters, the scale of such groupings is problematic as it obscures smaller, more local connections. The nature of such connections is well illustrated by the broch currently under excavation at Windwick, South Ronaldsay, which has been identified as having a number of architectural features which might be more typical of brochs in Caithness (Martin Carruthers, pers comm.). This is not surprising if we consider the Pentland Firth as a route of communication rather than a barrier (see Figure 9.11). Evidence for sea-going vessels from Iron Age Britain is particularly sparse in contrast to the comparatively rich evidence for boats from the Bronze Age and the Romano-Celtic period (Adams 2001, 307). But these sea connections were undoubtedly present and probably plied by a range of different types of craft (Rainbird 2007, 158-159) and most of these boats, propelled by small sails and oars or paddles, would in reasonable conditions, have been quite capable of open sea crossings. Analysis of the 3rd century AD Barlands Farm boat suggests it would have been capable of 4-5 knots under sail and 1.5-2 knots when rowed and fully laden with a cargo of up to 6.5 tonnes
(McGrail & Roberts 1999, 141-142) whilst Bronze Age boats such as those found in Dover and North Ferriby could have been paddled at average speeds of 3-4 knots (Gifford & Gifford 2004, 80-81; Roberts 2004, 39).

Figure 9.11 The location of Windwick in relation to selected other brochs in Orkney and North East Caithness. Connected by sea, a journey between Windwick and the clusters of brochs at Freswick and Keiss would be c. 25km and 32 km respectively. In contrast journeys up the east coast of Orkney and across to the brochs of Eynhallow Sound would be around 60km, and trips to Loupandessness and the Broch of Borwick, through Scapa Flow and up the west coast, would be approximately 50-55km. Map based on Ordnance Survey material © Crown Copyright/database right 2013. An Ordnance Survey/EDINA supplied service.
Using these speeds as a broad estimate it would have been possible to make the journey from Windwick to brochs in Caithness such as at Freswick and Keiss in 3-5 hours, significantly shorter than journeys to some of the other brochs within Orkney such as Howe, Stromness or the brochs along Eynhallow Sound. None of these journeys would have been undertaken lightly, with both the speed and safety of trips being heavily dependent upon a detailed local knowledge of wind, currents, and the direction of flow and timing of tides, but the examples do serve to illustrate that modern geographical boundaries should not reflect the social and political landscapes of the past.

Particularly within the island groups it is easy to underestimate the areas and distances between places, in the Western Isles it is more than 200km from Berneray in the south to the Point of Ness in the north, and similarly Shetland is more than 100km from Sumburgh Head to Herma Ness, yet in all the island groups a person would never be more than a handful of kilometres from the coast. This serves to highlight the central role played by the marine environment in Atlantic Scotland, and indeed Atlantic Europe. There are strong suggestions that the sea was subject to multiple taboos during the Iron Age, for example in the comparative absence of fish consumption (Dobney & Ervynck 2007; Willis 2007). However such taboos were not barriers to the use of the sea, rather they represent a means of understanding and negotiating such physically and symbolically dangerous elements of the world, with appropriate means of avoiding repercussions if a taboo was forgotten or accidently broken (Westerdahl 2005). The maritime landscape was then as much a part of the Iron Age world as hill-land and arable fields, and provided wide ranging inter-connections with other areas beyond the horizon. These wider worlds represent a larger cultural sphere of which Iron Age people in Atlantic Scotland would have been part (Cunliffe 2001; Henderson 2007). Such wide-ranging relationships would inevitably have brought with them social tensions. In her
consideration of the later prehistory of the Isle of Man, Catherine Frieman (2008) suggests that through the careful positioning of settlements and promontory forts, the inhabitants of the island both physically and socially created a separate place with clearly defined edges in which they could feel empowered within their world. Similar contradictions have been identified in the Middle Iron Age landscapes of Atlantic Scotland; between the control of space and the creation of insiders and outsiders, and the clear evidence for shared cultural elements such as roundhouses. These are I would suggest two sides of the same coin, with the establishment of such emphatic spatial and social structures representing not isolated, inward facing local communities shunning all contact with the outside world, but rather groups who controlled and mediated complex, short- and long-distance relationships between groups through the careful ordering of the world.

9.4 A SHARED IRON AGE COSMOLOGICAL MODEL?

Across, and indeed beyond, Atlantic Scotland, both communities and the landscapes in which they dwelt were created and reproduced through routines of practices – agriculture, hunting & gathering, craftwork, industrial production, building and so on – that would have brought people together in a variety of ways. These people would have shared similar experiences, and through this derived elements of their identity and maintained relationships with others. All of this would have been underpinned by a diverse and complex social knowledge of how to undertake particular tasks or fulfill particular roles. Complex procedures such as smelting iron, navigating at sea or determining the right time to plant seeds could not be written down in a scientific manual, instead they would have required to be learnt; through watching and listening to more experienced members of the community, committed to memory (see Netting 1993; Pálsson 1994; Budd & Taylor 1995; Ingold 2000) as part of individual and community knowledge. Other knowledge would have provided guidance on the appropriate forms of buildings and where in the landscape different structures should be constructed. Taboos
regarding the use of certain parts of the landscape and the plants and animals that they contained would have been passed on across generations, as would the ways of mediating and avoiding their dangers. All of this knowledge represents an indivisible understanding of the world in which Iron Age people dwelt.

It was impossible to separate the practical tasks such as farming, from the symbolic systems that sustained them (Bradley 2003a) and the paraphernalia and processes of agriculture and metalworking in particular provided metaphors for death, regeneration, fertility and continuity (Williams 2003; Bradley 2005; Giles 2007b) which speak to the same need for ontological security as the emphasis being placed on creating and defining places and identities that has been discussed in the preceding chapters. A series of factors – local topography and orientation of the landscape, relationships to different resources and environmental niches, links to the past – were considered and carefully chosen when determining the location of settlements, and further factors – a concern with the past, orientation of doorways and settlement, development of anthropogenic deposits rich in fertility and tenurial meaning, close definition and control of space – were key in structuring the building and development of settlements and the landscapes in which they sat. This suite of factors can be likened to East Asian traditions of *Feng Shui* which represent a mélange of art, science and folk wisdom used to determine architectural order and suitable sites for settlement (Hwangbo 1999; Han 2001), and similarly blur and indeed subordinate the modern western divide between the symbolic and the functional, into a single coherent cosmological understanding of the relationships between people and the world in which they dwelt. Different elements of such a cosmology can be seen to have been given greater or lesser importance by different individual communities, and certain areas within Atlantic Scotland, even though the underlying principles are readily identifiable.
9.5 CONCLUSIONS

Through the combination of quantitative and qualitative approaches to the landscape the preceding chapters explored the nature and importance of the human experience of dwelling in the world in Atlantic Scotland, and in particular Orkney, during the first millennium BC. This has enabled the identification of a number of apparently common themes in the ways in which people ordered and understood their world during later prehistory, but has also highlighted the considerable variation in this at a variety of scales, from the individual to regional trends.

Rather than thinking in terms of continuity or discontinuity of occupation and inhabitation, from the Late Bronze Age into the Early and Middle Iron Age, what can actually be identified is the dynamic and fluid nature of the landscapes of Atlantic Scotland over many hundreds of years. What is significant is not whether a site occupied during the Later Bronze Age was subsequently developed into a broch, but rather that there is a shift in the ways in which people were dwelling in the world. The Bronze Age can, with the exception to some degree in the Western Isles, be seen as a period in which connections between people and place were to a greater degree fluid and changing; thus people would have been used to moving around extensive landscapes on a day-to-day basis to undertake different practices, and also over longer time-scales abandoning, building and reoccupying places within the landscape. In contrast the growing formalization and elaboration of complex roundhouses is one part of a broader trend towards increasing permanence and belonging to a place. Brochs would have been dwelt in over many generations, with the acts of inscription of place developing from the repeated practices of building and agricultural cultivation. Midden heaps and anthropogenic soils, alongside the weathered and repeatedly repaired stonework that formed the brochs and roundhouses, would have been rich in the symbolism and meaning of preceding generations. Such a close connection between people and day-to-day places can be seen alongside the growing formalization of insiders and outsiders which represents a strategy for mediating and
negotiating relationships with people and places on larger temporal and spatial scales. The question therefore of how typical, or indeed atypical, Orkney is when compared with the rest of the British Isles during later prehistory is to a degree moot. In the messy variations of individual settlements, and regional and sub-regional trends, Orkney is typical of all the other areas of Atlantic Scotland and the British Isles which diverge from an idealized and non-existent norm based upon interpretations and modifications to a shared and underpinning culturally understood cosmological model of the world.
10 CHAPTER TEN: CONCLUSIONS

10.1 THE VALUE OF LANDSCAPE SURVEY

Over recent years there has been a growing recognition amongst Iron Age scholars of the importance of considering the surroundings of settlements, both in terms of non-settlement features and the wider landscape (Haselgrove et al. 2001, 11; Ruiz Zapatero 2011, 91). It is also clear that no single approach can be universally applied to the Scottish landscape (ScARF. 2012k). In areas such as the Western Isles and Northern Scotland, lowland areas have generally been the focus of archaeological investigations, and although the potential locations for settlement in more mountainous or rugged areas is more limited, it is clear that in these regions upland areas have been less intensively surveyed (Cowley 2005, 180; Rennell 2009, 279). The same bias in investigation can be identified in the lack of attention that upland areas of Orkney have received, and the results of the walkover survey presented in chapter 5 demonstrate the potential for under investigated upland areas within the archipelago, with areas of well-preserved and locally significant prehistoric landscapes being identified. The survey work also highlighted the impact of intensive cultivation upon the visibility of archaeological features, not only in lower-lying areas which have been subject to cultivation for many centuries, but also areas of hill-land that have been ‘taken in’ during the twentieth century.

Whilst these cultivated areas have limited preservation of extant features, in undertaking geophysical surveys around a number of sites, the fallacy of describing Orkney’s archaeological resource as islands of archaeology in a modern landscape (Lamb & Turner 1991) is exposed. A combination of the walkover and geophysical survey demonstrates the prehistoric landscapes of Orkney to be every bit as rich as other areas, such as the Thames Valley or East Lothian (e.g
Yates 2007; Brend 2010), that have been impacted by many years of agricultural cultivation. The recent success of aerial photography in Orkney has gone some way to changing the thinking about the preservation and recognition of such landscapes (Cowley 2010; 2011) as have the exciting results of the extensive geophysical survey of the Orkney World Heritage Site (Downes & Card forthcoming). My research sits alongside such investigations in clearly demonstrating the value of undertaking landscape-scale investigations that go beyond the immediate surroundings of individual sites, and that apply these non-intrusive techniques as a means of interpreting the landscape, rather than prospecting for new sites. When set within proper theoretical frameworks and research agendas, remote-sensing and non-intrusive data offers the opportunity to ask questions that are beyond the scope of traditional excavations.

In the context of this research these questions have been driven by inquiries into the formation, both natural and cultural, of the spaces and places that have been identified, and the nature of the practices and relationships through which they developed. As such boundaries have provided a key focus, and it is in the discussion and interpretation of boundaries that it has been possible to provide the best linkages between the archaeologies of hill-land and agricultural land. Boundaries were identified in a wide variety of ways – as extant earthworks, geophysical anomalies, shadow and soil marks on aerial photos and as visual limits recognised during phenomenological recording. Rather than focusing on the differences between these types of boundaries, it is instead more appropriate to think about the similarities, and indeed differences, in practices that formed these features as a means of structuring space, and controlling the movement of people and animals. This focus upon boundaries and the practices that formed them has also underlined the value of recording the dykes identified in the upland areas as lines, rather than point data, a practice that is of course common in the transcription of aerial photographs but less prevalent in many walkover surveys. The extra level of data provided by additional layers of recording and interpretative
inquiry can be seen to clearly contribute to our understanding of the ways in which spaces were formed, utilised and altered during the later prehistoric period. Rather than discussing upland or lowland archaeology this more relational approach offers the potential for a joined up understanding of these landscapes. This is particularly relevant in areas such as Orkney in which areas of ‘hill’ and field are located close together.

10.2 STUDYING EMBODIED LANDSCAPES

A concern with an experiential perspective on the landscape can be seen to have permeated all aspects of the fieldwork detailed in this thesis. This should come as no surprise – in the act of undertaking walkover survey I have experienced the landscapes I was studying, and to ignore such experiences would be to ignore a valuable dataset. Also highlighted is the importance of integrated and theoretically aware approaches to the collection and interpretation of data, such as walkover and geophysical survey, as well as the use of aerial photography which might all typically be regarded as objective. As discussed in Chapter 3, the dichotomy between subjective and objective data is somewhat artificial, and both the intertwined nature of data collection and datasets has made the integration and interpretation of qualitative and quantitative data both more valid and easier.

The phenomenological dataset is not of course a proxy for the experience of later prehistoric people, but it is a method by which an interpretation of the experience of landscape can be made, and aspects of human life and experience that are not addressed by traditional archaeological techniques can be considered. One of phenomenology’s great strengths is seeking out what is obvious but unquestioned and thereby questioning it (Seamon & Sowers 2008, 44), and the techniques utilised above have shown considerable potential in exploring the landscape as something more than a passive backdrop to socio-economic models of land-use. Instead the environment becomes the medium through which social relationships and
identities are constructed and reworked. In developing existing methodologies for the recording and collection of phenomenological data, I have contributed to the ongoing development of an important area of archaeological research. The use of other people, as well as myself to collect data through structured walks, and explicit recording and acknowledgment of individual experiences has proved particularly valuable, and has taken a small step in addressing issues of the white, male, middle-class stereotypes that have been identified as problematic in much phenomenological practice (Meskell 1996, 6-9). The small selection of people who contributed their experiences to this research provide a good illustration of the multiple and subjective nature of the ways in which the same physical landscape can be experienced and understood in different ways. Ideas of hill-land, cultivated, sea, water etc. are defined differently by different individuals and groups rather than being absolute concepts. ‘Hill-land’ can, for example, be found at almost any elevation, whilst subtle nuances can be identified in the ways in which people think about different areas of inshore and deep-water marine environments, and these ideas can in turn be linked to the cosmological models by which people understand their world (McNiven 2003; Westerdahl 2005; Morphy & Morphy 2006; Lee 2007; Vergunst 2012). Care is therefore needed in defining particular types of landscape place, however this viewpoint of the landscape as a dynamic and active part of people’s worlds, when combined with an understanding of past settlement patterns, and the nature of spaces and practices within the landscape, can provide useful insights into the ways in which people utilised and understood the landscape, and the worlds in which they dwelt during the past.

10.3 PRESENTING ARCHAEOLOGICAL LANDSCAPES

The ways that these embodied and experiential landscapes are studied is inextricably linked to the ways in which they are presented. Acts of writing and presenting an experience of the landscape are unavoidably abstractions of the actual sense of being in the place, with words and images at best only a substitute for being bodily ‘there’. However within most modes of
publication and dissemination these are the only options available. Over recent years there have been a number of calls for, and attempts at, more radical approaches to publication (e.g. Shanks 1992; 2004; Bender et al. 1997; 2007; Bradley 2006; Cochrane & Russell 2007; Bailey 2014) and the variety of different of images throughout the thesis, and in particular the text and images of Chapter 7 represent attempts to engage with the ways in which the physical landscapes, the genius loci of places, and the experience of dwelling-in-the-world, might be conveyed to people unable to experience them for themselves. Traditionally maps and photographs can be rather passively engaged with, their validity unchallenged, and in the context of a publication often appear as appendages or augmentations to the text which fulfils the primary role of communicating information. My aim in producing the images, whether the three-dimensional models of site distributions in Chapter 5, or the word clouds, circular views and maps of journeys presented in Chapter 7 was to communicate a sense of the forms and experiences of being in these landscapes that might prompt a greater engagement from their audience. These figures are of course experimental in nature, particularly those presented in Chapter 7, and the responses to them are inherently subjective. However I would venture that in creating a series of images which better attempt to make the practices, phenomena and materiality of these landscapes visible, I have achieved my aims of presenting embodied landscapes in different ways, integrating text, images and different datasets, and of prompting a stronger engagement from the audience.

10.4 CONCLUSIONS

This thesis set out to evaluate and reflect upon the application of a range of quantitative and qualitative landscape archaeology techniques, in considering the ways in which space and place was created, structured and used during the later prehistoric period in Orkney. These two research strands can be seen to sit comfortably within the two schools of landscape archaeology identified by Johnson (2007). However rather than following the pessimistic
Chapter Ten: Conclusions

Perspective suggested by Thomas (2008) that practitioners of these two approaches should not seek dialogue between each other, this thesis has demonstrated some of the potential and possibilities for the integration and engagement between the quantitative spatial approaches, and embodied approaches to the landscapes of the past. Indeed I would suggest that there is a clear need for both quantitative and qualitative techniques to be considered alongside each other, as equally valuable, within integrated theoretical perspectives. Such an approach also provides the means by which to fully articulate and integrate the ways in which data are collected, interpreted and presented, rather than isolating for example, geophysical surveyors from landscape theorists.

The landscapes of the later prehistoric period in Orkney have been understudied, and whilst further excavation of both broch and non-broch sites can contribute significantly to our understanding of the ways in which people during the period lived I would suggest that there is also a clear need for further work to address the wider contemporary landscapes. This thesis has illustrated the potential for both extant earthworks and plough-truncated archaeology to be identified in Orkney. However simply to identify these features is not sufficient. Programmes of extensive survey – walkover in upland areas, and geophysics in agricultural landscapes – can undoubtedly add to our knowledge of first millennium BC landscapes. However these need to be undertaken within a theoretical framework which enables archaeologists to move beyond simple prospection to explore the ways in which people dwelt in these landscapes. This in turn can illuminate some of the ways in which people structured and understood relationships between each other, and also between themselves and the world they inhabited.

The investigations in both study areas have demonstrated the potential of these approaches to the landscapes of Orkney. Outwith the confines of PhD research there is scope now to expand
Chapter Ten: Conclusions

this work. The capacity for survey to complement traditional area excavation of sites at Westness, Rousay, as part of the NABO ‘Orkney, Gateway to the Atlantic’ project has been demonstrated, and by expanding this work, particularly the gradiometer survey, the relationships between the broch and contemporary non-broch settlements can be further illuminated and explored. Similarly the results from the coastal area of Evie pose interesting questions regarding the nature of agricultural and economic strategies during the Iron Age, and a combination of further gradiometer survey, with the application of other geophysical techniques – namely earth resistance and Ground Penetrating Radar – to explore the character of the boundary features around the Broch of Burgar and the Knowe of Grugar would make a valuable contribution to understanding some of the variation between Iron Age settlements. The greatest potential for a true, landscape-scale survey is however at Yesnaby, and this will form the prime focus for future study. An extensive and contiguous survey, considering both surface and sub-surface features is proposed that transcends traditional site boundaries and recognises and investigates the later prehistoric landscape as a single entity. The basis for this will be the expansion of the walkover and gradiometer surveys to provide seamless coverage of an area in excess of 100 hectares. Other geophysical techniques and limited intrusive investigation will be integrated to address specific questions as to the character and date of certain landscape features, such as the cross-contour dykes, and the promontory fort at the Brough of Bigging. The success of all of these proposed pieces of research however lies in the application of the techniques explored in detail in the preceding chapters within a coherent theoretical structure. Such an interpretative framework considers the data in terms of the past spaces and places that they reflect, and the practices and people which would have created and reworked them.

In my introduction I outlined two aims which I hoped to achieve through the research presented in this thesis. The first was to investigate the embodied landscapes of the later
Chapter Ten: Conclusions

prehistoric period in Orkney, in an effort to explore the relationships between people and the
worlds in which they dwelt during the first millennium BC. This has been discussed in detail in
the two preceding chapters, and I would submit that, in offering some new insights into the
means by which people structured the spaces and places that formed their lived worlds, the
ways in which these may have contributed to the structuring of relationships and identities,
and the manner in which these aspects appear to have changed during the period, I have
achieved this goal. The detailed case-studies sit at the opposite end of a scale of interpretation
from grand synthetic narratives of the history of Atlantic Scotland (e.g. Cunliffe 2001;
Henderson 2007); indeed only through such a local scale is it possible to identify the subtleties
and specifics of the ways in which landscapes were used and understood, and in turn recognise
the fine-grained detail and mess of the day-to-day lives of individual communities which larger
scale synthesis often obscure.

The second aim was to explore the ways in which a suite of quantitative and qualitative
approaches to the landscape might be applied to the study of later prehistory in Atlantic
Scotland. Landscape archaeology techniques have generally not been widely applied,
particularly to the Iron Age in the region, and where such investigations have been made this
has tended to focus upon an economic understanding of the landscape, or the landscape has
been implicitly seen as a passive, natural, backdrop to settlement distributions. Of particular
importance then has been to consider these landscapes as inhabited and embodied, rather
than as an inert container for human life. Through a blend of traditional survey and the
application of a phenomenological perspective a contribution has been made to the
appreciation of the human perspective of later prehistoric worlds, and also the ways in which
archaeologists might go about both studying and presenting such landscapes and establishing
a dialogue between the two schools of landscape archaeology.
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APPENDIX 1: SITE REGISTER – YESNABY SKAILL
<table>
<thead>
<tr>
<th>Site</th>
<th>Site_type</th>
<th>Site_subcategory</th>
<th>NGR</th>
<th>Details</th>
<th>Inventory</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Promontory Fort</td>
<td>HY 21890 15737</td>
<td>Brough of Bigging. Extant earthworks and orthostats suggest three ramparts. Internal orthostats &amp; eroding deposits suggest a non-domestic purpose.</td>
<td>HY21 NW7; SAM 6214; OR635</td>
<td>Prehistoric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Feature</td>
<td>HY 21920 15480</td>
<td>Rough line of orthostats that defines a break of slope to the southeast of a possible quarry. No clear function</td>
<td>-</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Millstone</td>
<td>HY 21935 15442</td>
<td>Unfinished millstone, appears to have broken during manufacture.</td>
<td>Possibly recorded as HY21 NW32</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Dyke</td>
<td>HY 22107 15200</td>
<td>A large, spread earth dyke running east from the coast along the contours</td>
<td>OR 2908</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Dyke</td>
<td>HY 22083 15160</td>
<td>Probable feellie dyke with a stone core/base overlain by slumped earth &amp; turf.</td>
<td>OR 2909</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Cairn</td>
<td>HY 2234 14929</td>
<td>A pair of possible barrows situated in a heavily wind eroded area.</td>
<td>-</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Cairn</td>
<td>HY 22386 14779</td>
<td>Mound of earth and jumbled stone situated on a prominent ridge.</td>
<td>-</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Settlement</td>
<td>HY 23272 14647</td>
<td>Group of extant earthworks covering an area of approximately 1.5ha, including a roundhouse and a series of enclosures.</td>
<td>OR 2898</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Cairn</td>
<td>HY 23271 14697</td>
<td>Large, amorphous mound of medium-large stones. Probably derived from material from YES008.</td>
<td>-</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Cairn</td>
<td>HY 23725 14168</td>
<td>Large, slightly sub-circular mound, with visible orthostats positioned at the summit of Cringla Field. Location may suggest a Neolithic tomb. Capped by a small modern stone cairn.</td>
<td>-</td>
<td>Neolithic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Dyke</td>
<td>HY 23354 14314</td>
<td>Linear arrangement of large (c.1.20m diameter) sandstone boulders, following the contour and apparently dividing the valley into two.</td>
<td>-</td>
<td>Medieval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Dyke</td>
<td>HY 23293 14251</td>
<td>Ephemeral traces of a sub-peat dyke running NW-SE; possibly related to YES011 although very different in character.</td>
<td>-</td>
<td>Prehistoric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Platform</td>
<td>HY 23251 14343</td>
<td>Sub-circular platform partially cut into a gentle north facing slope. A possible kerb, obscured by peat, defines the northern edge.</td>
<td>-</td>
<td>Prehistoric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Dam</td>
<td>HY 23698 14648</td>
<td>Substantial earth dam constructed across the Burn of Sowadee, probably as part of agricultural improvements to the land to the east.</td>
<td>-</td>
<td>Modern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Enclosure Group</td>
<td>HY 23784 14679</td>
<td>Earth and stone banks (0.9x0.3m) forming a sub-square enclosure, with the fourth side formed by a burn. Two possible entrances both approx. 1.2m wide. Further enclosures noted to NE on APs.</td>
<td>-</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Landmark Type</td>
<td>Group</td>
<td>HY</td>
<td>M.O.</td>
<td>Description</td>
<td>Age</td>
</tr>
<tr>
<td>-----</td>
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</tr>
<tr>
<td>16</td>
<td>Enclosure</td>
<td>HY 23616 14828</td>
<td>Group of extant earthworks similar to YES008 although more heavily eroded. Possible small roundhouse.</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Enclosure</td>
<td>HY 23532 15138</td>
<td>Three large sub-rectangular enclosures formed from sub-peat banks, with some evidence of internal divisions and clearance cairns.</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Cairn</td>
<td>HY 22019 15666</td>
<td>Large, well-built square drystone cairn situated at the corner of a modern fence line.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Cairn</td>
<td>HY 22033 14730</td>
<td>Sub-oval stone cairn built on a rocky outcrop on a ridge line.</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Dyke</td>
<td>HY 22549 14524</td>
<td>Short length of sub-peat dyke, containing large irregular orthostats, running south from Staney Knowe.</td>
<td>Prehistoric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Cairn</td>
<td>HY 22619 14570</td>
<td>Small, steep sided stone cairn on the summit of Staney Knowe. Does not appear to be of any great antiquity.</td>
<td>Modern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Quarry</td>
<td>HY 22537 14621</td>
<td>Large sub-oval quarry pit cut into the north facing slope below Staney Knowe. A curvilinear bank immediately to the north is probably a spoil heap.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Enclosure</td>
<td>HY 23025 14760</td>
<td>Severly eroded L-shaped dyke, composed of earth and irregular orthostats which probably relates to the enclosures YES008.</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Quarry</td>
<td>HY 22939 14708</td>
<td>Large sub-oval quarry pit cut into the south side of the Peerie Hill. Steep sides are fairly heavily overgrown and there is a possible spoil heap to the south.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Cairn</td>
<td>HY 22996 14791</td>
<td>Pair of amorphous stone clearance cairns situated at the corner of a modern field boundary. Some stones are clearly large enough to be structural and may be related to an extension of YES008/023.</td>
<td>Modern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Cairn</td>
<td>HY 22748 14794</td>
<td>Elongated, sub-oval stone and earth mound that has been truncated by a comparatively modern drainage ditch. The lack of apparent form probably suggests this is a clearance cairn rather than a burial monument.</td>
<td>Prehistoric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Quarry</td>
<td>HY 22733 14969</td>
<td>Pair of gently sloping hollows containing some loose stone, a short distance to the south of the enclosures YES128/131.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Cairn</td>
<td>HY 22701 14839</td>
<td>Pair of sub-circular stone and earth mounds similar to YES026 and possibly related to the dyke YES126</td>
<td>Prehistoric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Burnt Mound</td>
<td>HY 22639 14881</td>
<td>Large, roughly kidney shaped mound, livestock erosion reveals the mound is composed of earth and a large quantity of stone, much of it heavily burnt. Surrounded by a number of old/dried up burns.</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Boundary</td>
<td>HY 22139 16564</td>
<td>Small roughly built stone cairn. Probably a damaged boundary marker but may be some sort of clearance cairn.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Type</td>
<td>Name</td>
<td>Reference</td>
<td>Description</td>
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</tr>
</tbody>
</table>
| 31  | Broch              | HY 22419 16758  | HY21 NW1;OR1237 | Iron Age  
Partially excavated and heavily eroded broch with a small extra mural settlement, much as described by Mackie & the RCAHMS.                                                                                                                                   |
| 32  | Cairn Boundary     | HY 22541 17034  |           | Post Med.  
Small, square partially collapsed drystone cairn, similar to YES030, YES018 etc.                                                                                                                                                                                                                                                          |
| 33  | Feature            | HY 22525 16904  |           | Prehistoric  
Unusual arrangement of aligned parallel orthostats apparently eroding from a subsoil (?gley).                                                                                                                                                                                                                                           |
| 34  | Sheep Dip          | HY 22426 16563  |           | Modern  
A pair of drystone walls leading to a concrete dipping tank, positioned alongside the burn above the beach.                                                                                                                                                                                                                                 |
| 35  | Dyke               | HY 22642 17091  |           | Bronze Age  
A large stone and earth dyke running inland from the coast. Although built to exentuate a natural ridge there are clear signs of construction including cist-like and orthostatic elements.                                                                                                                                                 |
| 36  | Limekiln           | HY 22640 17157  |           | Early Mod.  
Sub-circular drystone structure built into a natural slope. Interior shows evidence of intense burning, there is a probable stokehole on the downslope side and a large scatter of fire-cracked stone to the south.                                                                                                           |
| 37  | Dyke               | HY 22774 17488  |           | Post Med.  
Small earthen bank running inland from the coast.                                                                                                                                                                                                                                                                                             |
| 38  | Promontory Fort    | HY 22674 17498  |           | Prehistoric  
Possible dyke that defines the landward edge of a natural promontory. Jumbled and partial nature of stonework is difficult to define but it presents little barrier.                                                                                                                                                       |
| 39  | Dyke               | HY 22753 17545  |           | Prehistoric  
Ephemeral stone linear only visible where it is eroding out of the subsoil. Some suggestion of cours ed masonry & facing as well as at least one orthostat.                                                                                                                                                                           |
| 40  | Cairn Clearance    | HY 22736 17297  |           | Prehistoric  
Three closely associated sub-circular (c.1.0m dia) jumbled piles of stones, exposed on a slope as a result of wind erosion of turf/soil. An unusual location for clearance cairns.                                                                                                                                                        |
| 41  | Feature            | HY 22587 16694  |           | Iron Age  
Deposit of possible burnt stone associated with a possible orthostat and paving that is eroding from the bank of the burn.                                                                                                                                                                                                                   |
| 42  | Rig & Furrow       | HY 22539 16711  | HY21 NW44 | Medieval  
Two distinct parcels of rig & furrow cultivation divided by a burn. Aligned roughly N-S/NE-SW and ridges are approximately 4.70-5.10m from peak to peak.                                                                                                                                                                                    |
| 43  | Dyke               | HY 22554 16768  |           | Post Med.  
Low earthen bank, built on a base of intermittent flat sandstone slabs. The dyke runs E-W, is cut by two burns and overlies YES042. Similar in character to YES037.                                                                                                                                                 |
| 44  | Quarry             | HY 23925 15269  |           | Post Med.  
Sub-circular depression cut into a slope. No evidence of exposed bedrock, but a possible spoilheap to the south.                                                                                                                                                                                                                           |
| 45  | Quarry             | HY 23698 15761  |           | Modern  
Large quarry pit with sharply cut bedrock exposed. Now used for dumping rubbish.                                                                                                                                                                                                                                                                                                                               |
### Appendix 1: Site Register - Yesnaby - Skail

<table>
<thead>
<tr>
<th>Site</th>
<th>Register</th>
<th>HY</th>
<th>Grid Reference</th>
<th>Description</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 Quarry</td>
<td>Yesnaby</td>
<td>24033</td>
<td>15213</td>
<td>Small sub-oval, moderately sloped depression with exposed bedrock visible in a number of places. Grass covered, sub-oval spoilheaps are visible to the north, south and south-east.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>47 Dyke</td>
<td>Yesnaby</td>
<td>23993</td>
<td>15239</td>
<td>Slightly sinuous linear earthbank, with hints of a ditch to the north. A clear vegetation difference visible, with better quality grass downslope &amp; more scrubby grass &amp; occasional heather upslope.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>48 Cairn</td>
<td>Clearance</td>
<td>24109</td>
<td>15376</td>
<td>Low, amorphous mound of stone and earth. Heavily damaged by rabbits and cut by modern drainage ditch.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>49 Quarry</td>
<td>Yesnaby</td>
<td>24024</td>
<td>15364</td>
<td>Small sub-oval hollow cut into the slope with a possible spoilheap to the south. Corresponds to the location of a short cist</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>50 Quarry</td>
<td>Yesnaby</td>
<td>23978</td>
<td>15323</td>
<td>Large sub-oval hollow now partially full of water. A series of linear, grassed over soilheaps are visible to the south.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>51 Quarry Pair</td>
<td>Yesnaby</td>
<td>23998</td>
<td>15434</td>
<td>Two substantial, fairly sharply defined quarry pits, with exposed bedrock and clear spoilheaps to the southeast. The slightly larger, more northerly quarry probably post dates the smaller pit.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>52 Quarry</td>
<td>Yesnaby</td>
<td>24014</td>
<td>15489</td>
<td>Rather amorphous shaped, but sharply defined quarry with large amounts of exposed bedrock, and substantial spoilheaps to the southeast.</td>
<td>Modern</td>
</tr>
<tr>
<td>53 Cairn</td>
<td>Yesnaby</td>
<td>24024</td>
<td>15537</td>
<td>Low, rather spread, sub-circular mound situated on a false crest of the hill with panoramic views. Most clearly defined along the fenceline where livestock erosion has exposed a rich peaty soil.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>54 Structure</td>
<td>Yesnaby</td>
<td>22453</td>
<td>16041</td>
<td>Large brick and concrete structure with a large, south facing doorway. Part of the gunnery training range YES152 to west</td>
<td>Modern</td>
</tr>
<tr>
<td>55 Feature</td>
<td>Yesnaby</td>
<td>22640</td>
<td>16148</td>
<td>Cist like feature constructed from sandstone slabs, and now full of further slabs/rubble. Outside chance this is a cist, more likely a fence post socket.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>56 Structure</td>
<td>Yesnaby</td>
<td>22493</td>
<td>16532</td>
<td>Remnants of a structure crossing the burn, includes an inverted &quot;V&quot; shaped drain covered by a partially eroded earth and stone platform with traces of coursed masonry facing.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>57 Structure</td>
<td>Yesnaby</td>
<td>22604</td>
<td>16268</td>
<td>Small, but well built stone building now partially collapsed. Surrounded by rubble and grassed over wall lines which correspond to more substantial complex of buildings on 1st ed. OS map.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>58 Mound</td>
<td>Yesnaby</td>
<td>22443</td>
<td>16217</td>
<td>Low spread, sub-circular stone and earth mound damaged by ploughing, animal burrows and a modern fence. There is some suggestion of form to some of the stonework.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>59 Mound</td>
<td>Yesnaby</td>
<td>22819</td>
<td>17904</td>
<td>Large complex mound known as the Knowe of Geosso, which shows evidence of having been dug into/quarried. Several massive orthostats are visible to the southeast running in a roughly NE-SW alignment.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>60 Enclosure Pair</td>
<td>Yesnaby</td>
<td>22804</td>
<td>17861</td>
<td>Series of low, spread earthen banks forming a pair of enclosures.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>Number</td>
<td>Type</td>
<td>HY</td>
<td>OR</td>
<td>Description</td>
<td>Age</td>
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</tr>
<tr>
<td>61</td>
<td>Mound</td>
<td>23951</td>
<td>15416</td>
<td>Undulating and somewhat amorphous mound on a ridge, which shows some evidence of small-scale quarrying, and exposed rubble.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>62</td>
<td>Quarry</td>
<td>24055</td>
<td>15680</td>
<td>Large quarry; exposed bedrock and partially full of water. Large amounts of rubble and wall lines suggest there may have been an accompanying steading here.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>63</td>
<td>Cairn</td>
<td>24102</td>
<td>15742</td>
<td>Substantial, apparently earthen barrow on the summit of the hill. Somewhat damaged by cultivation. Location of a cist &amp; steatite urn found in 1883.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>64</td>
<td>Quarry</td>
<td>23963</td>
<td>15704</td>
<td>Large, partially water filled and grassed over quarry pit.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>65</td>
<td>Platform</td>
<td>23260</td>
<td>14799</td>
<td>Possible platform; an unusually flat, sub-circular area on a north facing slope, further defined by different vegetation pattern &amp; increased stoniness.</td>
<td>Unknown</td>
</tr>
<tr>
<td>66</td>
<td>Cairn</td>
<td>23253</td>
<td>15034</td>
<td>Large jumbled stone cairn, composed of substantial fieldstone at the corner of a field, beside a modern field drain.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>67</td>
<td>Cairn</td>
<td>23015</td>
<td>17310</td>
<td>Heavily plough-truncated barrow, but with at least one in-situ orthostat visible.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>68</td>
<td>Cairn</td>
<td>23094</td>
<td>17352</td>
<td>Low, spread mound, heavily truncated by ploughing but with a clear concentration of medium/large sandstone fragments, particularly to the north.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>69</td>
<td>Cairn</td>
<td>23047</td>
<td>17352</td>
<td>Low, heavily ploughed out mound, although quite well defined particularly on the south side. Several possible orthostats visible.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>70</td>
<td>Cairn</td>
<td>23114</td>
<td>17349</td>
<td>Very ephemeral, heavily plough truncated mound, but close association with other barrows suggest this may be a further burial monument.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>71</td>
<td>Cairn</td>
<td>23111</td>
<td>14747</td>
<td>Large, jumbled cairn composed of generally large angular sandstone in the southeast corner of the field.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>72</td>
<td>Feature</td>
<td>23080</td>
<td>14761</td>
<td>A sub-oval hollow, associated with a considerable concentration of exposed angular sandstone.</td>
<td>Unknown</td>
</tr>
<tr>
<td>73</td>
<td>Cairn</td>
<td>22960</td>
<td>17330</td>
<td>Large jumbled, amorphous pile of stone. Material may well originally have been derived from the barrows to the east.</td>
<td>Modern</td>
</tr>
<tr>
<td>74</td>
<td>Trackway</td>
<td>23145</td>
<td>14888</td>
<td>Disused trackway running east-west from disused farm buildings. Defined by a slightly raised, cambered surface and a ditch to the south.</td>
<td>Modern</td>
</tr>
<tr>
<td>75</td>
<td>Cairn</td>
<td>23231</td>
<td>14864</td>
<td>Jumbled pile of angular stone immediately north of YES074 and situated on an old fenceline.</td>
<td>Modern</td>
</tr>
</tbody>
</table>
### Appendix 1: Site Register - Yesnaby - Skaill

<table>
<thead>
<tr>
<th>ID</th>
<th>Type</th>
<th>HY</th>
<th>Description</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>Cairn</td>
<td>HY 22998 15154</td>
<td>Very large, crescent shaped clearance cairn which appears to be related to the peat cuttings immediately to the north. Seems likely that this material may be derived from stonework buried in the peat.</td>
<td>Modern</td>
</tr>
<tr>
<td>77</td>
<td>Dyke</td>
<td>HY 23376 15160</td>
<td>Low, broad linear earthwork dyke with occasional stones visible, running NW-SE. Appears to have been heavily truncated by modern cultivation. Visible on 1881 OS map.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>78</td>
<td>Feature</td>
<td>HY 22986 15462</td>
<td>Area of hillside notable for a considerable concentration of large angular stone. Although no clear alignments or structural elements could be seen there was some cohesion evident.</td>
<td>Unknown</td>
</tr>
<tr>
<td>79</td>
<td>Cairn</td>
<td>HY 22999 15326</td>
<td>Somewhat spread pile of angular stone, appears to be positioned near an old field boundary.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>80</td>
<td>Dyke</td>
<td>HY 22846 15404</td>
<td>Rough linear feature composed of soil and angular stone, much of which appears to roughly 'face' the sides of the feature.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>81</td>
<td>Scatter</td>
<td>HY 23267 16518</td>
<td>Large, somewhat amorphous shaped concentration of medium-large sandstone fragments on top of a low ridge.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>82</td>
<td>Quarry</td>
<td>HY 23011 16518</td>
<td>Large quarry pit, clearly still in use, although the size suggests there is perhaps some longevity, as does variation in the spoilheaps, some have softened slopes and are heavily grassed others appear more recent.</td>
<td>Modern</td>
</tr>
<tr>
<td>83</td>
<td>Mound</td>
<td>HY 23143 16745</td>
<td>Sharply defined, sub-circular mound. Two loose piles of rubble suggest a recent clearance cairn, however a number of orthostats may hint at structural remains.</td>
<td>Unknown</td>
</tr>
<tr>
<td>84</td>
<td>Dyke</td>
<td>HY 23085 16661</td>
<td>A somewhat sinuous linear earthwork, running across the contour that appears to have been heavily plough truncated.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>85</td>
<td>Sluice gate</td>
<td>HY 23125 16763</td>
<td>A large orthostat with a central hole and apparent fittings for some kind of sluicegate. Two short sections of drystone walling extend to the east and west forming a crude dam.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>86</td>
<td>Dyke</td>
<td>HY 22985 16823</td>
<td>Low, spread earthen linear that appears to be a continuation of YES088. Surrounded by peaty/boggy area which may explain its preservation but may also be masking the dyke's full extent.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>87</td>
<td>Feature</td>
<td>HY 22824 16725</td>
<td>Possible area of paving eroding out of the bank of the burn, which extends to the south as a layer of chippy fragmented stone.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>88</td>
<td>Dyke</td>
<td>HY 22855 16900</td>
<td>A substantial linear earthwork, similar in character to YES035, and which appears to be related to YES086. Nothing of the core is discernible although the dyke has been breached in a number of places by the burn to the north.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>89</td>
<td>Mound</td>
<td>HY 23156 16810</td>
<td>Low, spread, somewhat amorphous mound and concentration of med-large sandstone fragments.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>90</td>
<td>Cairn</td>
<td>HY 23217 16804</td>
<td>Ephemeral sub-circular mound with a large central depression, the mound also appears to be the focus of a concentration of largish fragments of sandstone.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>Site Register HY/UX</td>
<td>Reference</td>
<td>Description</td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>91 Chapel HY2214 15706</td>
<td>Group of rectilinear earthworks representing the remains of a chapel and possible burial ground. HY21 NW6</td>
<td>Medieval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92 Mound HY2284 14657</td>
<td>Long, low mound positioned close to a relict burn. May be natural, but there is a degree of cohesion to some of the exposed stone.</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>93 Rig &amp; Furrow HY2198 15715</td>
<td>An area of rig &amp; furrow cultivation running East-West and situated upslope of the chapel (YES091). Rigs are approximately 0.3m high and c. 4.5m between peaks.</td>
<td>Medieval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>94 Feature Possible HY22185 15398</td>
<td>Unusual arrangement of three medium sized sandstone orthostats. Possibly natural</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95 Cairn Boundary HY22148 15342</td>
<td>Pair of roughly built and now partially collapsed drystone cairns which seems to represent some form of boundary marker or gateway.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>96 Feature HY22185 15303</td>
<td>L-shaped concentration of stone that may represent a wall. No coursing but some evidence of facing, and contains a reused mortar/quernstone.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>97 Cairn Clearance HY22189 15285</td>
<td>Slightly amorphous, sub-oval mound composed of jumbled stone that is heavily grassed over.</td>
<td>Prehistoric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>98 Feature HY22056 15374</td>
<td>Group of four possible post-settings arranged in a rectangle. The settings are constructed from slim orthostats set into the ground, but there is very little silting inside the settings.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99 Cairn Boundary HY21998 15347</td>
<td>Pair of small square drystone cairns that appear to form a gateway. Each cairn is approximately 1m square and similar to a number of other cairns e.g. YES018, YES101, YES103.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 Millstone HY21973 15416</td>
<td>Broken/unfinished millstone Possibly recorded as HY21 NW32</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>101 Cairn Boundary HY21943 15408</td>
<td>Pair of small, square drystone cairns, although the northern of the pair is partially collapsed, similar to YES099.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102 Earthworks HY21959 15448</td>
<td>Very ephemeral low earthen bank, supplemented by a series of very large earthfast stones, which forms a sub-oval enclosure, two narrower, parallel linears may over lie this enclosure although the relationship is unclear. Visible on 1st &amp; 2nd ed. OS.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103 Cairn Boundary HY21938 15549</td>
<td>Small, square drystone cairn, similar to YES099. A small hole runs horizontally through the centre.</td>
<td>Post Med.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>104 Burnt Mound HY22597 14962</td>
<td>A large roughly conical mound, with a smaller crescent shaped 'tail' extending to the north. Obvious relict burn bed to north and east. Erosion has exposed rich dark soils containing fragments of burnt stone. HY21 NW3; SAM 1346/5286; OR 1239</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105 Burnt Mound Possible HY22573 15085</td>
<td>Small mound of heavily burnt stone, charcoal and rich dark soils which has been cut through by the burn. SAM 5286</td>
<td>Bronze Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site</td>
<td>HY</td>
<td>OS</td>
<td>Description</td>
<td>Age</td>
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<tr>
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</tr>
<tr>
<td>Burnt Mound</td>
<td>2203</td>
<td>15040</td>
<td>Amorphous mound, with eroding burnt material. A low rectilinear enclosure extends from the mound to the southeast, exposed stonework and orthostats suggest this may be structural.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>Dyke</td>
<td>2209</td>
<td>15004</td>
<td>Well defined, although somewhat slumped earth and stone dyke with a possible face to the south. A stone setting at the southwest end of the dyke is presumably for a post.</td>
<td>Medieval</td>
</tr>
<tr>
<td>Enclosure</td>
<td>22455</td>
<td>15067</td>
<td>Irregular enclosure formed by a low stone and earth bank on three sides and a curvilinear ditch to the south. Ditch truncates the dyke to the south.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>Cairn</td>
<td>2224</td>
<td>15160</td>
<td>Small, somewhat amorphous mound, composed primarily of stone but heavily grassed over. Similar to other small mounds on the slopes of Cruabreck.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>Cairn</td>
<td>2391</td>
<td>16368</td>
<td>Substantial grass covered barrow mound, much as described by RCAHMS. A concentration of stones to the south of the mound has some form but may have been redeposited. Scatters of stone in the recently ploughed field may indicate further cists.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>Cairn</td>
<td>23515</td>
<td>17181</td>
<td>The Knowe of Angerow, a large sub-circular mound containing considerable quantities of stone, some very large which may represent the remnants of a collapsed cist.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>Cairn</td>
<td>23516</td>
<td>17168</td>
<td>A large sub-circular grass covered mound, less well defined than YES111 but there are hints of stonework present.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>Cairn</td>
<td>23483</td>
<td>17139</td>
<td>Large, grassed covered mound with even, well defined sides and a flat top which appears to have been dug into at some point. Hints of a stony core.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>Cairn</td>
<td>23176</td>
<td>17296</td>
<td>Low, rather indistinct mound only notable for a large earthfast stone on the eastern side.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>Quarry</td>
<td>23504</td>
<td>17098</td>
<td>Uneven, crescent shaped group of intermingled mounds focused around a small pond positioned at the top of a steep, south facing slope.</td>
<td>Unknown</td>
</tr>
<tr>
<td>Cairn</td>
<td>23120</td>
<td>17043</td>
<td>Low rather spread mound with some visible stone.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>Cairn</td>
<td>23133</td>
<td>17040</td>
<td>Heavily grassed over and somewhat amorphous mound which appears to be composed of considerable quantities of stone.</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>Structure</td>
<td>22945</td>
<td>16391</td>
<td>Bonwick, a derelict steading with associated structures and features including stackbase, millrace &amp; wheel, and small plantcru type enclosures.</td>
<td>Modern</td>
</tr>
<tr>
<td>Structure</td>
<td>23099</td>
<td>16274</td>
<td>Little Bonwick, the derelict remnants of a small steading which has been reworked as a dilapidated byre.</td>
<td>Modern</td>
</tr>
<tr>
<td>Mound</td>
<td>23501</td>
<td>16622</td>
<td>Very low mound which appears to have been spread in the primary direction of ploughing. Appears to be composed primarily of stone.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>Number</td>
<td>Type</td>
<td>HY</td>
<td>Description</td>
<td>Period</td>
</tr>
<tr>
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</tr>
<tr>
<td>121</td>
<td>Dyke</td>
<td>22778 14293</td>
<td>Low linear sub-peat dyke, with a number of large earthfast stones, which runs downhill across the contours. Truncated to the north by peat cutting.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>122</td>
<td>Structure</td>
<td>23170 14476</td>
<td>The Sauna. A small wooden structure built on stilts, with an external fireplace on the back and a small triangular door. Built immediately to the east of the burn which has been dammed up to form a plunge pool.</td>
<td>Modern</td>
</tr>
<tr>
<td>123</td>
<td>Mound</td>
<td>22777 14612</td>
<td>Distinct, but amorphous sub-circular grassy mound immediately to the east of a small burn. No evidence of burnt stone, but possibly partially overgrown by peat.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>124</td>
<td>Dyke</td>
<td>22888 14610</td>
<td>Linear sub-peat dyke, with large, regular orthostats. Very similar to YES121. Despite the hillside being very steep in places, this runs perpendicular to the contours.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>125</td>
<td>Dyke</td>
<td>22772 14787</td>
<td>Curvilinear stone and earth bank, heavily grassed over and partially obscured by peat growth.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>126</td>
<td>Dyke</td>
<td>22747 14841</td>
<td>Curvilinear stone and earth bank, similar to YES125, although not as well defined.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>127</td>
<td>Earthworks</td>
<td>22733 15262</td>
<td>Small rectangular enclosure with rounded corners and a possible entrance at southwest corner. May represent the remnants of a small planticrue or similar structure.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>128</td>
<td>Enclosure Group</td>
<td>22730 15142</td>
<td>Group of enclosures visible on OS map but significantly more complex. Banks are rather variable in nature but generally well made from stone and earth.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>129</td>
<td>Dyke</td>
<td>22729 15058</td>
<td>Well built dyke, appears to be the faced stone base presumably of some sort of feelie dyke.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>130</td>
<td>Earthworks</td>
<td>22705 15012</td>
<td>L-shaped bank, with a possible entrance to the southeast which together with the end of YES129 defines a shallow depression.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>131</td>
<td>Enclosure Group</td>
<td>22776 15017</td>
<td>Complex of dykes, constructed from a combination of earth, coursed masonry and orthostats which form a group of irregular enclosures.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>132</td>
<td>Dyke</td>
<td>22833 15002</td>
<td>Short stretch of dilapidated hill dyke that appears to have at one point been connected to YES131.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>133</td>
<td>Earthworks</td>
<td>22767 15218</td>
<td>Small sub-rectangular earthwork, similar to YES127, although with an entrance to the northwest.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>134</td>
<td>Cairn Clearance</td>
<td>22821 15199</td>
<td>Small crudely built cairn comprising stone, soil, wire and string.</td>
<td>Modern</td>
</tr>
<tr>
<td>135</td>
<td>Earthworks Group</td>
<td>22786 15100</td>
<td>Group of sub-rectilinear, earth and stone banks that may represent the remnants of a structure. Some erosion has exposed rubble but in the main the earthworks are quite sharply defined.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>Site Register</td>
<td>HY</td>
<td>Description</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
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<td></td>
</tr>
<tr>
<td><strong>136 Dyke</strong></td>
<td>2284</td>
<td>Linear bank, primarily composed of turf/earth with very occasional stones visible. A hint of a companion ditch is visible on the upslope side.</td>
<td>Post Med.</td>
<td></td>
</tr>
<tr>
<td><strong>137 Cairn</strong></td>
<td>2263</td>
<td>Small, roughly built square cairn positioned between two peat cuttings.</td>
<td>Post Med.</td>
<td></td>
</tr>
<tr>
<td><strong>138 Earthworks Group</strong></td>
<td>2240</td>
<td>Complex group of substantial earthworks with obvious wall lines/structures apparent as well as several possible robber trenches/quarries.</td>
<td>Post Med.</td>
<td></td>
</tr>
<tr>
<td><strong>139 Sluice gate</strong></td>
<td>2254</td>
<td>Collapsed group of stones, one with a carefully cut hole, positioned at the centre of a low bank. A dried up pond upslope, and a channel heading downslope from the collapsed gate are both visible.</td>
<td>Post Med.</td>
<td></td>
</tr>
<tr>
<td><strong>140 Sluice gate</strong></td>
<td>2246</td>
<td>Similar arrangement of features to YES139, although orthostatic element is intact.</td>
<td>Post Med.</td>
<td></td>
</tr>
<tr>
<td><strong>141 Enclosure Group</strong></td>
<td>2290</td>
<td>Group of enclosures, possibly related to the abandoned steading to the south and clearly cut by the road.</td>
<td>Early Mod.</td>
<td></td>
</tr>
<tr>
<td><strong>142 Dyke Group</strong></td>
<td>2279</td>
<td>Group of somewhat sinuous and broken dykes of somewhat variable construction (orthostats, jumbled stone, turf/earth) but broadly similar to dykes such as YES008. Obscured in places by peaty/waterlogged soils.</td>
<td>Prehistoric</td>
<td></td>
</tr>
<tr>
<td><strong>143 Structure</strong></td>
<td>2266</td>
<td>Roughly built and partially collapsed drystone structure in the form of an open ended V.</td>
<td>Modern</td>
<td></td>
</tr>
<tr>
<td><strong>144 Cairn Boundary</strong></td>
<td>2269</td>
<td>Pair of somewhat dilapidated square stone cairns, similar to YES099. There is some evidence of an old trackway extending to the east.</td>
<td>Post Med.</td>
<td></td>
</tr>
<tr>
<td><strong>145 Dyke</strong></td>
<td>2238</td>
<td>Stone and earth dyke which appears to be a continuation of YES004. Size and profile of bank are somewhat variable as a result of erosion.</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td><strong>146 Dyke</strong></td>
<td>2335</td>
<td>Remnants of a stoney dyke. Very scattered in places with several possible clearance cairns beside it. Overlapping break in the centre appears to be some sort of entrance. Cut by YES077.</td>
<td>Medieval</td>
<td></td>
</tr>
<tr>
<td><strong>147 Dyke</strong></td>
<td>2295</td>
<td>Low spread stone and earth dyke, heavily eroded in places, which exentuates a break of slope. Visible on 1972 OS map although possibly a remnant of something earlier.</td>
<td>Early Mod.</td>
<td></td>
</tr>
<tr>
<td><strong>148 Cairn Clearance</strong></td>
<td>2326</td>
<td>Large jumbled pile of angular sandstone, includes a piece of concrete and some scrap metal.</td>
<td>Modern</td>
<td></td>
</tr>
<tr>
<td><strong>149 Cairn Clearance</strong></td>
<td>2342</td>
<td>Large scatter of various size stone, there is no clear form or structure but there are distinct mounds here and there. Quite overgrown with grass and a thin covering of peat in places.</td>
<td>Post Med.</td>
<td></td>
</tr>
<tr>
<td><strong>150 Mound</strong></td>
<td>2352</td>
<td>Large, roughly sub-oval grassy mound surrounded by v. wet peat/bog. Top of mound is fairly flat, although heavily damaged by rabbit burrowing which has revealed a dark, silty soil.</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Type</td>
<td>Grid Ref.</td>
<td>Description</td>
<td></td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>Cairn Clearance</td>
<td>HY 23518 14725</td>
<td>Group of amorphous, but well sorted clearance cairns. Stone ranges in size from occasional boulder to large quantities of cobble sized angular sandstone, some scrap metal visible.</td>
<td></td>
</tr>
<tr>
<td>152</td>
<td>Structure</td>
<td>HY 22094 16126</td>
<td>Four concrete &amp; brick structures and a large concrete platform running N-S, the remains of the WWII gunnery training range. Also visible are remnants of various gun mountings, pathways and fixing stanchions presumably for masts etc.</td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>Scatter</td>
<td>HY 22300 14800</td>
<td>Scattered of flints, recorded in SMR but not located by the walkover survey. Mesolithic/Neolithic date. Only a 6 figure grid reference.</td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>Structure</td>
<td>HY 22795 15776</td>
<td>Dilapidated steading with a small earthwork enclosure to the south. Labelled as Westhouse on 1881 OS and School on 1902 OS.</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>Structure</td>
<td>HY 22914 15640</td>
<td>Small dilapidated stone, single room building. Earthworks suggest a pair of rectilinear enclosures to the northwest.</td>
<td></td>
</tr>
<tr>
<td>156</td>
<td>Structure</td>
<td>HY 23090 15730</td>
<td>Single unroofed structure shown on 1st ed. OS. Buildings were not visible and have clearly been demolished.</td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>Structure</td>
<td>HY 23085 15735</td>
<td>Single unroofed structure with accompanying enclosure shown on 1881 OS. Not visible on survey, clearly been demolished &amp; field has been heavily ploughed.</td>
<td></td>
</tr>
<tr>
<td>158</td>
<td>Mound</td>
<td>HY 23501 15435</td>
<td>A roughly crescent shaped mound situated next to a canalised burn. Shape and position might suggest a burnt mound, but no evidence of burnt material - may be spoil from ditch clearance</td>
<td></td>
</tr>
<tr>
<td>159</td>
<td>Cairn Clearance</td>
<td>HY 23168 15678</td>
<td>Group of amorphous clearance cairns in an area of rough ground. Some degree of sorting visible, and variable levels of overgrowth suggest an extended accumulation.</td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>Cairn</td>
<td>HY 22270 18327</td>
<td>Large probably anthropogenic mound, capped by modern stone marker cairn. Wind scaring has exposed apparent coarsed stone and possible orthostats</td>
<td></td>
</tr>
<tr>
<td>161</td>
<td>Dyke</td>
<td>HY 23437 18952</td>
<td>Linear earthenwork extending inland from the coast. Coursed masonry is exposed in the eroding dune face.</td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>Mill</td>
<td>HY 23355 18876</td>
<td>Eroded remnants of the 18th century Mill of Skail. Chunks of masonry and several pieces of corroded ironwork visible on beach. Anti-submarine nets appear to have been re-used to try and limit erosion.</td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>Structure</td>
<td>HY 23353 18823</td>
<td>Sub-circular drystone structure apparently set into the sand (although this could be the result of dune movement). Probably some kind of plantacre.</td>
<td></td>
</tr>
<tr>
<td>164</td>
<td>Structure</td>
<td>HY 22974 18725</td>
<td>Rectilinear structure. Sandstone, with clay bonding, traces of internal whitewash on well preserved southern wall which contains a hearth. Flagstone floor, possibly re-laid given appearance. 1965 AP shows this structure roofed</td>
<td></td>
</tr>
<tr>
<td>165</td>
<td>Settlement</td>
<td>HY 22938 18747</td>
<td>Several sections of masonry, and traces of midden, exposed in the eroding shore section, at two clearly separate levels. Corresponds to know location of Neolithic settlement &amp; Norse/Christian burials.</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Type</td>
<td>HY</td>
<td>OS</td>
<td>Description</td>
</tr>
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</tr>
<tr>
<td>166</td>
<td>Structure</td>
<td>HY 22870 18825</td>
<td>-</td>
<td>Derelict structure - one small roofed building with associated enclosures. Early Mod.</td>
</tr>
<tr>
<td>168</td>
<td>Mound</td>
<td>HY 22990 17733</td>
<td>Prehistoric</td>
<td>Low spread mound with obvious concentration of stone, positioned on the ridge line and associated with other known barrows.</td>
</tr>
<tr>
<td>169</td>
<td>Earthworks</td>
<td>HY 22963 17772</td>
<td>Post Med.</td>
<td>Well defined linear earthwork, with flat top and regular sloped sides. Hints of returns at each end, probably related to other enclosures/dykes noted in the area e.g YES060</td>
</tr>
<tr>
<td>170</td>
<td>Structure</td>
<td>HY 23027 17913</td>
<td>HY21NW 58</td>
<td>Remains of demolished steading known as Brockan. Only extant element is a concrete water tank. Rubble suggests several buildings. Earthworks provide evidence for surrounding enclosures and possible planticrue. Post Med.</td>
</tr>
<tr>
<td>171</td>
<td>Mound</td>
<td>HY 23156 17495</td>
<td>Bronze Age</td>
<td>Knowe of Neibigarth. Ploughed out remnants of barrow on prominent ridge. RCAHMS inventory noted presence of cramp HY21 NW18; OR1252</td>
</tr>
<tr>
<td>172</td>
<td>Quarry</td>
<td>HY 23128 17954</td>
<td>Post Med.</td>
<td>Large quarry pit visible on OS. Heavily grassed over and now being used as a dump for rubble. Single unroofed building shown on 1st edition OS. HY21 NW49</td>
</tr>
<tr>
<td>175</td>
<td>Earthworks</td>
<td>HY 22650 18483</td>
<td>Post Med.</td>
<td>Linear earthwork cut by ditch/burn. Some hints of foundation slabs but exposed section shows earthwork formed entirely of soil (?turf)</td>
</tr>
<tr>
<td>176</td>
<td>Structure</td>
<td>HY 22853 18574</td>
<td>Early Mod.</td>
<td>Garricott. Abandoned, semi-derelict steading</td>
</tr>
<tr>
<td>177</td>
<td>Broch</td>
<td>HY 23571 18385</td>
<td>Iron Age</td>
<td>Large, spread mound, defined to north and east by boggy ground. Location of the Loupandessness broch &amp; Pictish Cross mould HY21 NW25; OR1259</td>
</tr>
<tr>
<td>178</td>
<td>Noust Possible</td>
<td>HY 23835 18659</td>
<td>Early Mod.</td>
<td>Tentatively identified as a group of possible boat nousts, positioned at interface between dune/machair and bog/loch. Given odd location these features may well be a product on natural sand movement.</td>
</tr>
<tr>
<td>179</td>
<td>Structure</td>
<td>HY 23444 17476</td>
<td>Modern</td>
<td>Velzian. Demolished remnants of a substantial steading with pond to the SW. Considerable amounts of concrete suggests modern elements. Visible as roofed on 1st &amp; 2nd ed. &amp; possibly unroofed on 1970 OS.</td>
</tr>
<tr>
<td>180</td>
<td>Settlement</td>
<td>HY 23125 18745</td>
<td>Neolithic</td>
<td>Skara Brae! HY21 NW12.00,12.01,12.03; OR1246</td>
</tr>
</tbody>
</table>
**Appendix 1: Site Register - Yesnaby - Skaill**

<table>
<thead>
<tr>
<th>181 Structure</th>
<th>HY 22904 18328</th>
<th>Cuppadee - Remains of steadin on hillside above - Skaill Home Farm. Visible on 1st, 2nd and modern OS</th>
<th>Early Mod.</th>
</tr>
</thead>
<tbody>
<tr>
<td>182 Cist</td>
<td>HY 24024 15364</td>
<td>Short cist noted in-situ in 1880. But subsequently quarried out see YES049. HY21NW4; OR1240</td>
<td>Bronze Age</td>
</tr>
<tr>
<td>184 Structure</td>
<td>HY 22484 15878</td>
<td>Forcewell. Large derelict steadin, with associated enclosures and waterwheel. HY21 NW48</td>
<td>Modern</td>
</tr>
<tr>
<td>185 Mound</td>
<td>HY 23413 18709</td>
<td>Not located - remains of a small cairn/barrow c. 23 feet in diameter HY21 NW16; OR1250</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>186 Structure</td>
<td>HY 23419 18614</td>
<td>Skaill House HY21 NW17.00, 17.01; OR1251</td>
<td>Post Med.</td>
</tr>
<tr>
<td>187 Quarry</td>
<td>HY 21879 15437</td>
<td>Millstone quarry at Qui Ayre - only sandstone suitable to make millstones in Orkney. Tradition suggests quarry in use from atleast 1775. HY21 NW28</td>
<td>Post Med.</td>
</tr>
<tr>
<td>188 Scatter</td>
<td>HY 234 183</td>
<td>Not located - low density scatter of flint and animal bone in Area F12 of Richards fieldwalking survey (1965). Finds primarily of waste flakes, but included an unusual polishing stone of ?Neolithic date, and one Skara Brae style scraper. HY21 NW31; OR2515</td>
<td>Neolithic</td>
</tr>
<tr>
<td>189 Structure</td>
<td>HY 225 158</td>
<td>Not located - reported pillbox in vicinity of Yesnaby HY24 NW37</td>
<td>Modern</td>
</tr>
<tr>
<td>190 Burial Ground</td>
<td>HY 2346 1860</td>
<td>Not located - Six burials excavated from beneath Skaill House, dated to 12-13th century AD. Possibly also relates to insubstantial evidence for chapel close to Skaill House (HY21 NW33) HY21 NW40; OR1251</td>
<td>Medieval</td>
</tr>
<tr>
<td>191 Structure</td>
<td>HY 23469 18758</td>
<td>Skara Brae visitor centre. A number of (presumably post-med) field boundaries &amp; drains were noted in the evaluations prior to construction HY21 NW41; OR2346</td>
<td>Modern</td>
</tr>
<tr>
<td>192 Structure</td>
<td>HY 2315 1764</td>
<td>Not located - Nebigarth. A substantial farmstead shown on 1st, 2nd and 1970s OS, but no trace now visible in the field. HY21 NW47</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>193 Limekiln</td>
<td>HY 2336 1867</td>
<td>Not located - limekiln shown approx. 50m west of Skaill House on 1st and 2nd ed. OS</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>194 Quarry</td>
<td>HY 2747 17489</td>
<td>Quarry perched on top of the cliff on the south side - of Rammageo. Very fine laminated sandstone, perhaps for roof slate? Shown on 1st ed. OS</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>196 Scatter</td>
<td>HY 22822 16564</td>
<td>Centrepoint of low density scatter noted during fieldwalking. Finds included: flint flake, burnt flint, possible worked stone, slag and several pieces of burnt bone. Further isolated possibly prehistoric finds were noted in the field to the south.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>Site</td>
<td>Site_type</td>
<td>Site_subcategory</td>
<td>NGR</td>
</tr>
<tr>
<td>--------</td>
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</tr>
<tr>
<td>1 Dam</td>
<td>HY 34536</td>
<td>HY 27074</td>
<td>Low rather spread linear earthwork, cut by a burn to expose a rubble core. Profile may suggest this feature was used to control water flow. Suggestion of return to northwest, but this has been truncated by later cultivation</td>
</tr>
<tr>
<td>2 Broch</td>
<td>HY 35210</td>
<td>27712</td>
<td>Broch of Burgar. Much as described by RCAHMS - RCAHMS: HY32 NE27; OR639 heavily dilapidated and shows evidence of much antiquarian furtiling!</td>
</tr>
<tr>
<td>3 Cairn</td>
<td>HY 35292</td>
<td>27859</td>
<td>Jumbled mass of stone dumped at the edge of the field, just above the coastal slope. Not very overgrown but may suggest remnants of stone structured in the vicinity.</td>
</tr>
<tr>
<td>4 Noust</td>
<td>HY 35401</td>
<td>27557</td>
<td>Sloping u-shaped hollow cut into the coastal slope, above rockshelf beach. A second possible noust is visible immediately to the NW.</td>
</tr>
<tr>
<td>5 Feature</td>
<td>HY 35402</td>
<td>27074</td>
<td>Possible masonry (roughly coursed sandstone) and enhanced soils exposed in the edge of a burn.</td>
</tr>
<tr>
<td>6 Broch</td>
<td>HY 35641</td>
<td>27283</td>
<td>Broch of Grugar. A large amorphous mound, much as described by the RCAHMS. No exposed masonry, but earthworks and stone clearly evident of a substantial group of structures.</td>
</tr>
<tr>
<td>7 Mound</td>
<td>HY 35543</td>
<td>26956</td>
<td>Large, spread, but well defined mound. Possibly natural but seems at odds with the surrounding landforms.</td>
</tr>
<tr>
<td>8 Tomb</td>
<td>HY 34823</td>
<td>27812</td>
<td>Chambered tomb - heavily excavated but evidence of in-situ masonry and orthostats are clearly visible. No record of who excavated the mound, but this may be one of the tumuli that Peterkin refers to.</td>
</tr>
<tr>
<td>9 Quarry</td>
<td>HY 34869</td>
<td>27690</td>
<td>Large quarry, possibly of some antiquity and perhaps associated with the nearby tomb. Vertically cut rockface, but much of the site is heavily grassed over. At least two orthostats appear to have been abandoned.</td>
</tr>
<tr>
<td>10 Burnt Mound</td>
<td>HY 34833</td>
<td>27596</td>
<td>A large, fairly conical mound positioned immediately to the east of the burn, with possible earthworks/platforms to the north. Animal erosion reveals the mound is composed of small angular stone (much of it burnt) and a rich brown friable soil.</td>
</tr>
<tr>
<td>11 Cairn</td>
<td>HY 35027</td>
<td>27733</td>
<td>Small, heavily overgrown clearance cairn.</td>
</tr>
<tr>
<td>12 Earthworks</td>
<td>HY 35044</td>
<td>27727</td>
<td>Sub-circular earthwork, with possible breaks to east &amp; west, the latter possibly associated with a ?noust. Partially overlain by the moden field boundary/ploughing headland.</td>
</tr>
<tr>
<td>13 Dam</td>
<td>HY 34670</td>
<td>27264</td>
<td>Large dam, with well built masonry sluicegate and pond on the uphill side, that appears to supply Burgar farm,</td>
</tr>
<tr>
<td>14 Mound</td>
<td>HY 33755</td>
<td>25611</td>
<td>Large amorphous grass covered mound positioned adjacent to a burn. No obvious burnt material although the mound clearly contains much stone. Surrounded by thick peat/bog</td>
</tr>
<tr>
<td>15 Mound</td>
<td>HY 33666</td>
<td>26312</td>
<td>Howana Gruna, a large, fairly steep sided mound apparently furtilied to reveal possible stonework/masonry. Surrounded by thick peat.</td>
</tr>
<tr>
<td>16 Cairn</td>
<td>HY 33955</td>
<td>26145</td>
<td>Oval, jumbled clearance cairn which has been partially grassed over.</td>
</tr>
</tbody>
</table>
### Appendix 2: Site Register - Eynhallow Sound

<table>
<thead>
<tr>
<th>No.</th>
<th>Type</th>
<th>Ref.</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Cairn Clearance</td>
<td>HY 33832 26447</td>
<td>Large jumbled stone cairn, some hints of coursing and square at NE corner, but generally haphazard.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>18</td>
<td>Noust</td>
<td>HY 35486 27401</td>
<td>Heavily overgrown boat noust, roughly coursed masonry is visible on southern &amp; western edges, Position corresponds to a small sandy break in the rock shelf - suggests this may have been a winter noust.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>19</td>
<td>Noust Pair</td>
<td>HY 35745 27274</td>
<td>Pair of nousts c.2m above the rock platform (presumably winter nousts). Clearly affected by coastal erosion, with traces of masonry &amp; orthostats extending seawards.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>20</td>
<td>Feature</td>
<td>HY 34832 26689</td>
<td>Shallow ditch visible eroding in bank of the burn. Fill is a friable grey-brown soil (probably derived from the topsoil), with increased proportion of jumbled stone &amp; gravel. Profile suggests ditch runs roughly north-south.</td>
<td>Unknown</td>
</tr>
<tr>
<td>21</td>
<td>Structure</td>
<td>HY 34760 26706</td>
<td>Derelict steading. Eastern gable end fairly well preserved including some internal fittings, clay bonding &amp; interior plaster. Evidence of outbuildings and associated enclosures.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>22</td>
<td>Structure</td>
<td>HY 34702 26719</td>
<td>Derelict, two room building with remnants of interior fittings. Two buttresses, one well-built the other crude, appear to have been added post-abandonment to prevent complete collapse.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>23</td>
<td>Structure</td>
<td>HY 34663 26544</td>
<td>Derelict steading comprising a small house, with separate range of outbuildings. Main building is pretty well built from well-cut sandstone blocks, and shows traces of mortar &amp; plaster as well as roof timbers.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>24</td>
<td>Structure</td>
<td>HY 34778 26408</td>
<td>Fairly large, but derelict steading. Main range is fairly well preserved, especially SE end, showing evidence of roofing material, door &amp; window fittings, hearth &amp; internal plaster. Surrounding earthworks suggest enclosures &amp; planticrues.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>25</td>
<td>Cairn Clearance</td>
<td>HY 34506 26541</td>
<td>Long roughly jumbled mound of sandstone. Possibly an old dyke, but more likely represents the clearance of fieldstone.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>26</td>
<td>Cairn Clearance</td>
<td>HY 34531 26743</td>
<td>Linear clearance cairn composed of a rough jumble of large, angular sandstone, which has been partially grassed over.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>27</td>
<td>Cist Possible</td>
<td>HY 3526 2767</td>
<td>The worn, rounded top of a firmly earthfast erect slab, lying NE-SW. It could be the remains of a cist (R G Lamb 1981)</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>28</td>
<td>Enclosure</td>
<td>HY 3567 2726</td>
<td>An enclosure is depicted on the 1st edition OS 6-inch map.</td>
<td>Early Mod.</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td>Blank</td>
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<tr>
<td>30</td>
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<tr>
<td>31</td>
<td>Enclosure</td>
<td>HY 36334 28910</td>
<td>EYN001: Sub-oblung drystone enclosure</td>
<td>Post Med.</td>
</tr>
<tr>
<td>32</td>
<td>Enclosure Group</td>
<td>HY 36365 28927</td>
<td>EYN002: Group of enclosures and walls, probably for kelp/fish drying</td>
<td>Post Med.</td>
</tr>
<tr>
<td>33</td>
<td>Dyke</td>
<td>HY 36437 28963</td>
<td>EYN003: Dilapidated L-shaped stone dyke</td>
<td>Post Med.</td>
</tr>
<tr>
<td></td>
<td>Site</td>
<td>HY</td>
<td>X</td>
<td>Y</td>
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<tr>
<td>34</td>
<td>Dyke</td>
<td>36494</td>
<td>28992</td>
<td>EYN004:</td>
</tr>
<tr>
<td>35</td>
<td>Enclosure Group</td>
<td>36561</td>
<td>29023</td>
<td>EYN005:</td>
</tr>
<tr>
<td>36</td>
<td>Enclosure Group</td>
<td>36522</td>
<td>29113</td>
<td>EYN006:</td>
</tr>
<tr>
<td>37</td>
<td>Feature</td>
<td>36543</td>
<td>29067</td>
<td>EYN007:</td>
</tr>
<tr>
<td>38</td>
<td>Structure</td>
<td>36520</td>
<td>29209</td>
<td>EYN008:</td>
</tr>
<tr>
<td>39</td>
<td>Feature</td>
<td>36509</td>
<td>29138</td>
<td>EYN009:</td>
</tr>
<tr>
<td>40</td>
<td>Structure</td>
<td>36510</td>
<td>29139</td>
<td>EYN10:</td>
</tr>
<tr>
<td>41</td>
<td>Dyke</td>
<td>36541</td>
<td>29274</td>
<td>EYN11:</td>
</tr>
<tr>
<td>42</td>
<td>Burnt Mound</td>
<td>36507</td>
<td>29381</td>
<td>EYN12:</td>
</tr>
<tr>
<td>43</td>
<td>Feature</td>
<td>36450</td>
<td>29440</td>
<td>EYN13:</td>
</tr>
<tr>
<td>44</td>
<td>Cairn Navigation</td>
<td>36424</td>
<td>29438</td>
<td>EYN14:</td>
</tr>
<tr>
<td>45</td>
<td>Structure</td>
<td>36425</td>
<td>29432</td>
<td>EYN15:</td>
</tr>
<tr>
<td>46</td>
<td>Cairn Navigation</td>
<td>36319</td>
<td>29409</td>
<td>EYN16:</td>
</tr>
<tr>
<td>47</td>
<td>Feature Group</td>
<td>36201</td>
<td>29284</td>
<td>EYN17:</td>
</tr>
<tr>
<td>48</td>
<td>Mound</td>
<td>36308</td>
<td>29228</td>
<td>EYN18:</td>
</tr>
<tr>
<td>49</td>
<td>Structure</td>
<td>36448</td>
<td>29243</td>
<td>EYN19:</td>
</tr>
<tr>
<td>50</td>
<td>Cairn</td>
<td>36364</td>
<td>29046</td>
<td>EYN20:</td>
</tr>
<tr>
<td>51</td>
<td>Cairn</td>
<td>36358</td>
<td>29055</td>
<td>EYN21:</td>
</tr>
<tr>
<td>Site</td>
<td>Type</td>
<td>Reference</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------</td>
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<td>-------------</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Cairn</td>
<td>HY 36317 28909</td>
<td>EYN022: Small, circular dry-stone structure, presumably a navigation beacon relating to the lodge EHS077.</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Noust</td>
<td>HY 36247 28815</td>
<td>EYN023: Group of five boat nousts.</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Kelp Pit</td>
<td>HY 36223 28791</td>
<td>EYN024: Stone lined kelp pit</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Enclosure</td>
<td>HY 36176 28707</td>
<td>EYN025: Group of dry-stone walls forming a series of crues and part of the infield boundary.</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>Enclosure</td>
<td>HY 36157 28652</td>
<td>EYN026: Group of drystone enclosures and a small bothy.</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>Mound</td>
<td>HY 36122 28621</td>
<td>EYN027: Small indistinct, sub-oblong stony mound, possibly midden material from the bothy (EHS056) immediately to the east.</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>Dyke</td>
<td>HY 36099 28597</td>
<td>EYN028: Small section of dry-stone wall, probably for kelp or fish drying.</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>Kelp Pit</td>
<td>HY 36052 28592</td>
<td>EYN029: Stone lined pit, now partially filled with storm beach material.</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Dyke</td>
<td>HY 35978 28638</td>
<td>EYN030: Semi-circular stone and turf dyke, open to the inland side.</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Dyke</td>
<td>HY 35946 28646</td>
<td>EYN031: Dry-stone walling, forming part of the infield boundary, as shown on nineteenth century mapping.</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>Cairn</td>
<td>HY 35942 28663</td>
<td>EYN032: Sub-oval stony mound, situated in an area of previously cultivated ground.</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>Feature</td>
<td>HY 35891 28662</td>
<td>EYN033: Large roughly square monolith, possibly a navigational marker.</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>Cairn</td>
<td>HY 35920 28707</td>
<td>EYN034: Sub-oval mound, centred upon a large orthostat.</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>Structure</td>
<td>HY 35983 28857</td>
<td>EYN035: Derelict roofless steading, joined to EHS066 by a shared, sub-circular enclosure.</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>Structure</td>
<td>HY 36029 28905</td>
<td>EYN036: Derelict roofless steading.</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>Feature</td>
<td>HY 35967 28833</td>
<td>EYN037: Crude alignment of stones including at least one orthostat that seems to be forming a retaining terrace wall.</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>Chapel</td>
<td>HY 35897 28808</td>
<td>EYN038: Complex of buildings recorded as a monastery or chapel, tentatively dated to the 12th century, although most of the surrounding buildings are 16th century or later.</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>Dyke</td>
<td>HY 35680 28828</td>
<td>EYN039: Jumbled remains of a drystone dyke.</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Mound</td>
<td>HY 36132 28974</td>
<td>EYN040: Low, sub-circular grassy mound. May be natural with no evidence of a stone core.</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Site Type</td>
<td>HY</td>
<td>Description</td>
<td>Date</td>
</tr>
<tr>
<td>--------</td>
<td>-----------</td>
<td>----</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>71</td>
<td>Mound</td>
<td>HY 36131 29275</td>
<td>EYN041: Low, vague grassy mound with no apparent stone - may be natural.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>72</td>
<td>Cairn</td>
<td>HY 35996 28707</td>
<td>EYN042: Stony, sub-rectangular mound, with visible rubble.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>73</td>
<td>Enclosure</td>
<td>HY 35844 29129</td>
<td>EYN043: Trapezoidal enclosure, attached to the hill-dyke EHS086.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>74</td>
<td>Platform</td>
<td>HY 36343 29898</td>
<td>EYN044: Low, grassy sub-rectangular mound positioned alongside a burn. Mound appears to be composed primarily of stone.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>76</td>
<td>Structure</td>
<td>HY 36185 28624</td>
<td>EYN046: Pier. Built from cassied stone, with a rubble core, and extending c.1m below high water. Shown as 2nd ed. OS as 'old pier'</td>
<td>Post Med.</td>
</tr>
<tr>
<td>77</td>
<td>Structure</td>
<td>HY 36293 29847</td>
<td>EYN047: Small lodge built from white painted corrugated iron.</td>
<td>Modern</td>
</tr>
<tr>
<td>78</td>
<td>Dyke</td>
<td>HY 36535 29274</td>
<td>EYN048: Substantial earthen dyke with stone base, with a slight ditch on the NW side.</td>
<td>Medieval</td>
</tr>
<tr>
<td>79</td>
<td>Dyke</td>
<td>HY 36325 29101</td>
<td>EYN049: Substantial earthen dyke, with flat stone foundations.</td>
<td>Medieval</td>
</tr>
<tr>
<td>80</td>
<td>Dyke</td>
<td>HY 36355 29090</td>
<td>EYN050: Earthen dyke, similar in construction to EHS079, which it runs broadly parallel to.</td>
<td>Medieval</td>
</tr>
<tr>
<td>81</td>
<td>Dyke</td>
<td>HY 36325 29101</td>
<td>EYN051: Ephemeral earthen dyke running along the contour. Visible on earlier maps. Apparently truncated by EHS078.</td>
<td>Medieval</td>
</tr>
<tr>
<td>82</td>
<td>Dyke</td>
<td>HY 36399 29099</td>
<td>EYN052: Very ephemeral dyke, with slight ditch to NW. Truncated by EHS079.</td>
<td>Medieval</td>
</tr>
<tr>
<td>83</td>
<td>Dyke</td>
<td>HY 36432 29055</td>
<td>EYN053: Broad earthen dyke apparently related to the enclosures EHS035.</td>
<td>Medieval</td>
</tr>
<tr>
<td>84</td>
<td>Dyke</td>
<td>HY 36463 29051</td>
<td>EYN054: Earthen dyke which appears to underlie EHS083.</td>
<td>Medieval</td>
</tr>
<tr>
<td>85</td>
<td>Dyke</td>
<td>HY 36322 29101</td>
<td>EYN055: Continuation of EHS078. Appears to reuse/be reused by EHS086/089</td>
<td>Medieval</td>
</tr>
<tr>
<td>86</td>
<td>Dyke</td>
<td>HY 35443 29315</td>
<td>EYN056: Earthen dyke comprising a double bank and central ditch. Western terminal consists of well-built drystone wall at the coast, presumably forming a navigational marker.</td>
<td>Medieval</td>
</tr>
<tr>
<td>87</td>
<td>Dyke</td>
<td>HY 35546 29090</td>
<td>EYN057: Large earthen dyke</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>88</td>
<td>Dyke</td>
<td>HY 35715 28941</td>
<td>EYN058: Northwestern section of 'infield' boundary, which overlies EHS089.</td>
<td>Post Med.</td>
</tr>
<tr>
<td>89</td>
<td>Dyke</td>
<td>HY 35649 28867</td>
<td>EYN059: Substantial, curvi-linear dyke, overlain by EHS088, and truncated in the middle by the rig &amp; furrow ploughing.</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>Appendix 2: Site Register - Eynhallow Sound</td>
<td></td>
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<tr>
<td><strong>90 Dyke</strong> HY 36124 29041 EYN060: Short stretch of possible sub-peat dyke which appears to represent a continuation of EHS089. - Prehistoric</td>
<td></td>
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<tr>
<td><strong>91 Dyke</strong> HY 36316 29063 EYN061: Small dyke with some stone visible. Relates to features shown on C19th mapping - Post Med.</td>
<td></td>
<td></td>
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<tr>
<td><strong>92 Dyke</strong> HY 36103 29035 EYN062: Short section of stone free, earthen dyke, - which joins EHS085 &amp; EHS090 at a confused junction. - Prehistoric</td>
<td></td>
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<tr>
<td><strong>93 Structure</strong> HY 36192 28920 EYN063: Sub-peat dyke, with stone core. Confused and truncated by peat cutting but evidence of possible curving return from upslope end. - Prehistoric</td>
<td></td>
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<tr>
<td><strong>94 Dyke</strong> HY 35996 28851 EYN064: Southeastern section of the 'infield' boundary. - Post Med.</td>
<td></td>
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<tr>
<td><strong>95 Feature</strong> HY 36033 29038 EYN065: Shallow ditch that appears to relate to water management immediately outwith the 'infield'. - Post Med.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>96 Sheep Dip</strong> HY 36044 28906 EYN066: Rectangular stone lined pit, aligned in the sunken way that runs beside the structures at Upper Barns (EHS066). - Post Med.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>97 Rig &amp; Furrow</strong> HY 35980 28800 Approx centre point for the rig and furrow ploughing that takes up the majority of the interior of the 'infield' on Eynhallow. - Post Med.</td>
<td></td>
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<tr>
<td><strong>98 Blank</strong></td>
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<td><strong>99 Blank</strong></td>
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<tr>
<td><strong>100 Quarry</strong> HY 37598 31286 Moderately sized quarry immediately up hil of a group of enclosures (outwith survey area). Low grassed over spoilheap to north. - Post Med.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>101 Dyke</strong> HY 37918 31329 Earth and stone hill dyke, in places a ditch/track is clearly visible on the up-hill side. - Post Med.</td>
<td></td>
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<tr>
<td><strong>102 Quarry</strong> HY 37814 31339 Small quarry bit, possibly associated with a stone dyke to NW. - Post Med.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>103 Structure</strong> HY 38018 31132 Small, sub-rectangular sheiling hut. Generally visible as low earthworks, but coursed masonry visible at rear, with well built hearth and possible doorway to NE. Several large flat slabs presumably represent collapsed roofing material. - Post Med.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>104 Quarry</strong> HY 38100 31007 Small, square cut quarry exploiting exposed area of bedrock. Given proximity this is presumably the source of material for EHS103. - Post Med.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>105 Mound</strong> HY 37664 31285 Low grassy mound, heavily affected by burrowing. Several earthfast stones visible Prehistoric</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>106 Enclosure</strong> HY 37500 30664 Sub-rectangular earthwork composed of earth and stone. Truncated by modern track, ditch and dyke. Post Med.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>107 Quarry</strong> HY 37410 30809 Large quarry. A spring immediately to the NW has a trough constructed around it using concrete and orthostats. Early Mod.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>108 Structure</strong> HY 37262 31028 Whome - Derelict steading. Transsects the big dyke the separates Westness from Quandale. - Post Med.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Number</td>
<td>Type</td>
<td>HY</td>
<td>OS</td>
<td>Description</td>
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<tr>
<td>109</td>
<td>Dyke</td>
<td>37314 30956</td>
<td>-</td>
<td>Large spread earthen dyke associated with, but possibly predating, EHS108. Post Med.</td>
</tr>
<tr>
<td>110</td>
<td>Dyke</td>
<td>37508 30839</td>
<td>-</td>
<td>Stone and earth dyke running across the contours, heavily plough truncated. Post Med.</td>
</tr>
<tr>
<td>111</td>
<td>Feature</td>
<td>37387 31037</td>
<td>-</td>
<td>Large hollow, situated immediately to the SE of the post-med. Trackway. Post Med.</td>
</tr>
<tr>
<td>112</td>
<td>Dyke</td>
<td>37438 31025</td>
<td>-</td>
<td>Hill dyke - Large sinuous turf/earth dyke running along the front of the terrace. Post Med.</td>
</tr>
<tr>
<td>113</td>
<td>Broch</td>
<td>37055 30723</td>
<td>HY33 SE11; OR523</td>
<td>North Howe - Massive mound with exposed masonry &amp; orthostats in various places. Main roundhouse is discernible as a discrete mound, with a curving section of exposed coursed masonry. Later planticrues constructed on top (see HY33 SE73). Iron Age</td>
</tr>
<tr>
<td>114</td>
<td>Cairn</td>
<td>37839 30671</td>
<td>HY33 SE39; OR621</td>
<td>Sub-oval mound, with some exposed stonework. Heavily damaged by rabbit burrowing &amp; possible excavation, but almost certainly a burial mound. Prehistoric</td>
</tr>
<tr>
<td>115</td>
<td>Mound</td>
<td>37896 30610</td>
<td>-</td>
<td>Small, sub-circular mound with several apparently earthfast stones visible. Damaged by burrowing &amp; possible excavation. Prehistoric</td>
</tr>
<tr>
<td>116</td>
<td>Structure</td>
<td>38060 30166</td>
<td>HY33 SE71</td>
<td>Small derelict steading, labelled as Hallgate on the 1st ed. OS. Main range of buildings with three rooms, attached derelict structure with well preserved corn dryer. Large rectangular enclosure extending along terrace to NW. Post Med.</td>
</tr>
<tr>
<td>117</td>
<td>Enclosure</td>
<td>38142 30019</td>
<td>-</td>
<td>Rubble remnants of rectangular planticrue with a central orthostatic divider. Interior is dryer and higher than surrounding landsurface presumably a result of manuring. Post Med.</td>
</tr>
<tr>
<td>118</td>
<td>Dyke</td>
<td>38199 29932</td>
<td>-</td>
<td>Remnants of a small drystone, coursed wall built across the mouth of the narrow valley at Wasday. Post Med.</td>
</tr>
<tr>
<td>119</td>
<td>Quarry</td>
<td>37589 30472</td>
<td>-</td>
<td>Large quarry just upslope of the modern dyke. Early Mod.</td>
</tr>
<tr>
<td>120</td>
<td>Mound</td>
<td>37881 29881</td>
<td>-</td>
<td>Low, but distinct mound positioned at the front of a shallow terrace. Presumably related to the steading of Eastaqueoy shown on the 1842 Westness estate map. Post Med.</td>
</tr>
<tr>
<td>121</td>
<td>Dyke</td>
<td>37853 29969</td>
<td>-</td>
<td>Eastaqueoy? Small complex of dykes that form the remnants of two enclosures. Post Med.</td>
</tr>
<tr>
<td>123</td>
<td>Structure</td>
<td>37590 30720</td>
<td>-</td>
<td>Quoycare - Tumbledown remains of steading centred on large sub-square enclosure. Post Med.</td>
</tr>
<tr>
<td>125</td>
<td>Enclosure</td>
<td>37815 30368</td>
<td>-</td>
<td>Pair of sub-rectangular enclosures formed from stone and earth dykes, which have been truncated by the modern road. Presumably associated with the steading at Cott which is immediately downhill. Post Med.</td>
</tr>
<tr>
<td>126</td>
<td>Mound</td>
<td>38114 31131</td>
<td>-</td>
<td>Small grassy mound with an earthfast stone visible at the top. Prehistoric</td>
</tr>
</tbody>
</table>
### Appendix 2: Site Register - Eynhallow Sound

<table>
<thead>
<tr>
<th>Site Type</th>
<th>Refs/Coordinates</th>
<th>Description</th>
<th>Date/Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>HY 38524 30902</td>
<td>Sub-square drystone structure with an apparent hearth (off-centre) positioned on a low ridge. Noted as 'old sheepfold' on 1st ed. OS although hearth suggests this may be something more</td>
<td>HY33 SE89, Post Med.</td>
</tr>
<tr>
<td>Dyke</td>
<td>HY 38173 30153</td>
<td>Turf dyke running along the contour above the derelict steading at Halligate.</td>
<td>-</td>
</tr>
<tr>
<td>Tomb</td>
<td>HY 37238 30495</td>
<td>Midhowe chambered cairn. Excavated 1932-34 by Callender &amp; Grant</td>
<td>HY33 SE1; OR605, Neolithic</td>
</tr>
<tr>
<td>Broch</td>
<td>HY 37169 30596</td>
<td>Midhowe broch. Excavated 1930-33 by Callender &amp; Grant</td>
<td>HY33 SE2; OR631, Iron Age</td>
</tr>
<tr>
<td>Broch</td>
<td>HY 37265 30371</td>
<td>South Howe broch. Broch visible as earthworks, with masonry exposed in coastal section. Excavation undertaken as part of NABO project in 2010 clearly showed presence of extra mural settlement.</td>
<td>HY33 SE10; OR475, Iron Age</td>
</tr>
<tr>
<td>Chapel</td>
<td>HY 37366 30172</td>
<td>St Mary's Kirk. Post reformation, probably built on medieval foundations.</td>
<td>HY33 SE16; OR487, Post Med.</td>
</tr>
<tr>
<td>Structure</td>
<td>HY 37385 30193</td>
<td>The Wirk. Well built stone tower with associated buildings including a hall, partially excavated by JS Clouston.</td>
<td>HY33 SE17; OR486, Medieval</td>
</tr>
<tr>
<td>Find</td>
<td>HY 370 307</td>
<td>A zoomorphic penannular brooch and a small piece of bronze chain found during ploughing (?in the early C20th). NOT LOCATED</td>
<td>HY33 SE19; OR606, Iron Age</td>
</tr>
<tr>
<td>Find</td>
<td>HY 3731 3067</td>
<td>Collection of flint artefacts collected from field above Midhowe - including scrapers (9), a leaf-shaped arrowhead, and two other tools. NOT LOCATED</td>
<td>HY33 SE23; OR609, Prehistoric</td>
</tr>
<tr>
<td>Find</td>
<td>HY 3731 3067</td>
<td>Stone axehead c. 20x7cm. NOT LOCATED</td>
<td>HY33 SE24; OR610, Prehistoric</td>
</tr>
<tr>
<td>Tomb</td>
<td>HY 37351 29771</td>
<td>Knowe of Rowiegar stalled cairn, reused as a souterrain.</td>
<td>HY32 NE1; OR553, Prehistoric</td>
</tr>
<tr>
<td>Settlement</td>
<td>HY 37569 29637</td>
<td>Norse hall and associated buildings at Westness excavated in the 1960s &amp; 70s.</td>
<td>HY32 NE17; OR543, Medieval</td>
</tr>
<tr>
<td>Broch</td>
<td>HY 37531 29663</td>
<td>A much disturbed mound, which excavation has suggested is the remnants of a partially eroded roundhouse.</td>
<td>HY32 NE19; OR550, Iron Age</td>
</tr>
<tr>
<td>Structure</td>
<td>HY 37297 29913</td>
<td>Group of dilapidated structures</td>
<td>HY32 NE64, Post Med.</td>
</tr>
<tr>
<td>Mound</td>
<td>HY 37698 30752</td>
<td>Low heather covered mound - possibly a burial mound.</td>
<td>HY33 SE38, Prehistoric</td>
</tr>
<tr>
<td>Mound</td>
<td>HY 38171 30653</td>
<td>Small grass covered mound on a north facing slope. No obvious stone content.</td>
<td>-</td>
</tr>
<tr>
<td>Earthworks</td>
<td>HY 38623 30558</td>
<td>Substantial group of earthworks which form a pair of sub-rectilinear enclosures on the north shore of the Muckle water. The larger enclosure has additional internal earthworks suggesting structures &amp; a turf dyke runs NW along side the water.</td>
<td>OR2939, Post Med.</td>
</tr>
<tr>
<td>Mound</td>
<td>HY 38404 30731</td>
<td>Low sub-circular stoney, grass covered mound alongside a burn, with a pair of orthostats in the centre.</td>
<td>-</td>
</tr>
<tr>
<td>No.</td>
<td>Type</td>
<td>HY Code</td>
<td>Description</td>
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<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>145</td>
<td>Mound</td>
<td>HY 38481 30616</td>
<td>Small, sub-circular mound with exposed stonework and the possible remains of a cist.</td>
</tr>
<tr>
<td>146</td>
<td>Cairn</td>
<td>HY 38450 29906</td>
<td>Very small cairn of angular stones, surrounded by evidence of modern burning.</td>
</tr>
<tr>
<td>147</td>
<td>Mound</td>
<td>HY 38327 30002</td>
<td>A substantial, but much mutilated mound.</td>
</tr>
<tr>
<td>148</td>
<td>Structure</td>
<td>HY 38327 30002</td>
<td>Small, sub-circular drystone structure built in the centre of the mutilated mound. Possible entrance to the NW.</td>
</tr>
<tr>
<td>149</td>
<td>Cist</td>
<td>HY 38339 29937</td>
<td>A sub-circular mound, damaged by excavation &amp; erosion positioned on the front of the terrace. A large cist, apparently excavated by Grant in 1936 is positioned slightly off centre.</td>
</tr>
<tr>
<td>150</td>
<td>Dyke Group</td>
<td>HY 37940 30150</td>
<td>A complex of earth and stone dykes, heavily eroded but clearly connected to the enclosures around the other nearby steadings (EHS116 &amp; 125)</td>
</tr>
<tr>
<td>151</td>
<td>Mound Group</td>
<td>HY 3828 3002</td>
<td>NOT LOCATED - A group of four small, probable burial, mounds, positioned along the front edge of the terrace. Two have earthfast stones</td>
</tr>
<tr>
<td>152</td>
<td>Structure</td>
<td>HY 37295 30383</td>
<td>Steading at Brough</td>
</tr>
<tr>
<td>153</td>
<td>Structure</td>
<td>HY 37394 30084</td>
<td>Steading at Skail</td>
</tr>
</tbody>
</table>
APPENDIX 3: JOURNEY RECORDS – YESNABY-SKAILL

Note that all participants in the field survey have given their approval for the details of their experiences to be included in this research.
Appendix 3: Journey Records – Yesnaby-Skaill
<table>
<thead>
<tr>
<th>Time</th>
<th>Landscape: e.g. Topography, vegetation etc</th>
<th>Visibility: What features are particularly noticeable? Are particular views obscured?</th>
<th>Experience: Briefly describe the nature of the location &amp; what your impressions are of both the place you have stopped and also the journey from the previous stopping point.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>11:15</td>
<td>Small hill with mounding shift grass covering for south with patches of heather and some patches of naked soil. Stable stone found to NW of summit.</td>
<td>Summit feels very exposed, steeply sided, steep drop facing towards W. No views out of face. Good view of features: a hedge, a small hill to the right, a distant hill to the left, and a distant hill to the right.</td>
</tr>
<tr>
<td>11:20</td>
<td>11:25</td>
<td>Small hill with mounding shift grass covering for south with patches of heather and some patches of naked soil. Stable stone found to NW of summit.</td>
<td>Summit feels very exposed, steeply sided, steep drop facing towards W. No views out of face. Good view of features: a hedge, a small hill to the right, a distant hill to the left, and a distant hill to the right.</td>
</tr>
<tr>
<td>11:25</td>
<td>11:30</td>
<td>Small hill with mounding shift grass covering for south with patches of heather and some patches of naked soil. Stable stone found to NW of summit.</td>
<td>Summit feels very exposed, steeply sided, steep drop facing towards W. No views out of face. Good view of features: a hedge, a small hill to the right, a distant hill to the left, and a distant hill to the right.</td>
</tr>
<tr>
<td>Stop</td>
<td>Time</td>
<td>Name:</td>
<td>Record of Journey: Yesnaby-Skaill 2008</td>
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<td>Text here (e.g., Topography, vegetation etc)</td>
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<td>What features are particularly noticeable?</td>
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<tr>
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<td>Briefly describe the nature of the location &amp; what your impressions are of both the place you have stopped and the journey from the previous stopping point.</td>
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</table>
### YESNABY, Orkney: Survey 2008

<table>
<thead>
<tr>
<th>Address</th>
<th>Journey Record No:</th>
<th>Weather: lasting wind from S6 with rain for company</th>
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</table>

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
<th>Weather:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gavin Landegger</td>
<td>7/10/08</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Time:</th>
<th>Landscape:</th>
<th>Visibility</th>
<th>Experience</th>
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</thead>
<tbody>
<tr>
<td>Stop</td>
<td>Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>12:05</td>
<td>e.g. Topography, vegetation etc</td>
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</table>

**Leshaws (11.22)**

**Smirk (11.23)**

**Leshaws**

<table>
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**Smirk**

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<td>Start</td>
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Appendix 3: Journey Records – Yesnaby-Skaill

[Handwritten notes and data entries]

**Journey Record No. 01**

- **Date:** 2008
- **Start Time:** [Blank]
- **End Time:** [Blank]
- **Name:** [Blank]
- **Landscape:**"Topography, vegetation etc"
- **Visibility:** [Blank]
- **Weather:** [Blank]
- **Experience:** [Blank]

**Sheet 1 of 6...**

- **Location:** Yesnaby-Skaill
- **Stop:** [Blank]
- **Start:** [Blank]
- **Place:** [Blank]
- **Thoughts:** [Blank]

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**Sheet 2 of 6...**

- **Location:** Yesnaby-Skaill
- **Stop:** [Blank]
- **Start:** [Blank]
- **Place:** [Blank]
- **Thoughts:** [Blank]
### YESNABY, Orkney: Survey 2008

**Journey Record No**: 01

**Sheet**: 5 of 6

<table>
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<th>Visibility: What features are particularly noticeable? Are particular views obscured?</th>
<th>Experience: Briefly describe the nature of the location &amp; what your impressions are of both the place you have stopped and also the journey from the previous stopping point.</th>
</tr>
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<tr>
<td>12:35 Stop</td>
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<td></td>
</tr>
<tr>
<td>13:00 Start</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>13:07 Stop</td>
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### Appendix 3: Journey Records – Yesnaby-Skaill

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<tr>
<th>Stop</th>
<th>Time</th>
<th>Name:</th>
<th>Landscape:</th>
<th>Date:</th>
<th>Visibility</th>
<th>Weather:</th>
<th>Journey Record No.:</th>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Start</th>
<th>E.g. Topography, vegetation etc.</th>
<th>Details of shore, profile, distance of hills, views, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Written in the main body of the record</td>
</tr>
</tbody>
</table>

**Notes:**
- Weather conditions
- Visibility
- Experience

**Journey:**
- Briefly describe the nature of the location & what you've observed.
- Impressions of the journey from the previous stopping point.

---

**Sheet:** 6 of 6
### Appendix 3: Journey Records – Yesnaby-Skaill

#### YESNABY, Orkney: Survey 2008

<table>
<thead>
<tr>
<th>Time</th>
<th>Landscape:</th>
<th>Visibility</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:23</td>
<td>Neather – C1 low ridge, hills behind to S. 10W fields, hills – most hills heavily cultivated.</td>
<td>Food</td>
<td>The place we have stopped at is not an excellent vantage point. One can see all around and to our slightly elevated position the ridge has a valley around the bottom of it. Feels safe and controlled piece of land. Seems to be very middle of land between sea and loch. Site feels as if we are sitting, looking out onto the surrounding area.</td>
</tr>
<tr>
<td>11:01</td>
<td>Beach - nearer + large gaps in between where more soil swept down. Plenty of gravel and small stones. Large gap in between.</td>
<td>Food</td>
<td>From Peace Hill we have reached W toward the sea. From this point only prominence of Peace Hill really visible. Can't see rest of valley. Only barely sea can see.</td>
</tr>
<tr>
<td>11:46</td>
<td></td>
<td>Food</td>
<td>Moved W from Peace Hill. Very enclosed space. Feels more secure and safe area. Peace Hill looks quite prominent. Stagney knew it was very prominent as this point journey to this point very easy. Scans also if there are lot of very destroyed field boundaries may have something to do with Peace Hill Round House. Not sure if more round be other settlement in this area. But it was been destroyed.</td>
</tr>
</tbody>
</table>

**Journey Record No:** 002

**Date:** 19 March 09

**Weather:** Bright, slight wind, very clear sky

**Name:** Patricia Edwards

**Sheet:** 2 of 5
Appendix 3: Journey Records – Yesnaby-Skaill

****

Highinsert, Eillness Veins of Skaill

...is a very steep slope

Open Stream running over a large

Next bend - the site is very hilly

Church of St. Peter, Nowton

This is a very open space with very

Mound up to the very small church

Here is the field headquarters

Field headquarters from church.

Next bend - the site is very hilly

Mound up to the very small church

Here is the field headquarters

Field headquarters from church.

Sheet...

Journey Record No.: Yesnaby, Orkney: Survey 2008
**YESNABY, Orkney: Survey 2008**

<table>
<thead>
<tr>
<th>Time: 12:39</th>
<th>Landscape:</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>Start</td>
<td>Visibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clear / Good</td>
</tr>
<tr>
<td>12:39</td>
<td>12:39</td>
<td>The sea is very visible. Can see to Hoy + Old Man of Hoy. Area was very windy. Can see hill to the north. Can see the sea at all where we started from. It is very open on the way.</td>
</tr>
</tbody>
</table>

---

Journey Records

- **Yesnaby – Skaill**

- **Sheet: 5 of... 3...**

**Weather:** Very windy but sunny
<table>
<thead>
<tr>
<th>Time</th>
<th>Landscape</th>
<th>Experience</th>
<th>Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:34</td>
<td>Sunny</td>
<td>Good</td>
<td>Visibility</td>
</tr>
<tr>
<td>10:46</td>
<td>Sunny</td>
<td>Good</td>
<td>Visibility</td>
</tr>
<tr>
<td>11:10</td>
<td>Sunny</td>
<td>Good</td>
<td>Visibility</td>
</tr>
</tbody>
</table>

Appendix 3: Journey Records – Yesnaby-Skalli

Note: The journey from the previous stopping point and impressions of the path the falls vary. The location is what your

Sheet: 3 of 5

Journey Record No: 005

Yesnaby Orkney Survey 2008.
<table>
<thead>
<tr>
<th>Time</th>
<th>Landscape</th>
<th>Visibility</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>Start</td>
<td>e.g. Topography, vegetation etc</td>
<td>What features are particularly noticeable? Are particular views obscured?</td>
</tr>
<tr>
<td>11.45</td>
<td></td>
<td>much less natural, stone in ground, the area is very open, becoming more rocky, more wind pulls off the top soil.</td>
<td>Long drainage ditches filled with stone, no streams, surrounded connecting into other fields systems</td>
</tr>
<tr>
<td>12.00</td>
<td></td>
<td>Here at final exist, ethe brough, prehistoric fort,</td>
<td>On entrance there is a line of upright stones, was suggested groyne house to the fort. On the stong top there is a modern pile of stones and multiple, older, in situ stones as well as burnt systems in some of the eastern exposed sides.</td>
</tr>
<tr>
<td>Date</td>
<td>Stop</td>
<td>Sheet</td>
<td>VR</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>-------</td>
<td>---</td>
</tr>
</tbody>
</table>
| 11/14/66 | 11:25h | 11:3 | Yesnaby-Skaill | Can post-sea stack at Gull Craig. | Can see Smalls at St. John’s | 412 | 64°F. Calm. | 4

This is an entry from the previous trip's report.
<table>
<thead>
<tr>
<th>Time</th>
<th>Landscape:</th>
<th>Visibility:</th>
<th>Experience:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>Start</td>
<td>e.g. Topography, vegetation etc</td>
<td>What features are particularly noticeable? Are particular views obscured?</td>
</tr>
<tr>
<td>12.09</td>
<td>12.17</td>
<td>On edge of cliff, grass.</td>
<td>Can see the broch, Mariwick burn. Sea Stocks. A notable burnt. Lots of inlets in high cliffs to the NW.</td>
</tr>
<tr>
<td>12.30</td>
<td>12.31</td>
<td>Cliff edge, high, some grass &amp; loose rock.</td>
<td>Mariwick Head very notable. Another prominent? Possibly Birsay? Huge vis &amp; horizon to W. Broch has become reregulated into cliff. Wonder how visible it would have been in Neolithic times.</td>
</tr>
</tbody>
</table>
Appendix 3: Journey Records – Yesnaby-Skaill

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time: 11:23</td>
<td>Landscape:</td>
<td>Visibility:</td>
<td>Experience:</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Stop</td>
<td>Start</td>
<td>e.g. Topography, vegetation etc</td>
<td>What features are particularly noticeable? Are particular views obscured?</td>
<td>Briefly describe the nature of the location &amp; what your impressions are of both the place you have stopped and also the journey from the previous stopping point.</td>
</tr>
<tr>
<td>11:23</td>
<td>In beach, so stones and slate like rubble, with some grass and moss growth</td>
<td>In rubble beach - so the sea is visible to the west, and the beach walls and door # to the east.</td>
<td>We have started inside the beach, looking out to sea; there seems to be good areas for boats to be dragged up, it would be interesting to know the extent of the coastal damage and erosion. Looking out of the door, it is hard to see anything (because of how high the rubble clas... and the stone filled bank obscuring the site view.</td>
<td></td>
</tr>
<tr>
<td>11:37</td>
<td>stone beach boats, sea weed, moss + algae on rocks.</td>
<td></td>
<td>Stopped at the bay area south of the beach, it is close to Brock and houses like a great area for land boats, gather seaweed, ready shaped stone tools and drift wood/anything dusty.</td>
<td></td>
</tr>
</tbody>
</table>

**Appendix 3: Journey Records – Yesnaby-Skall**
Appendix 3: Journey Records – Yesnaby-Skall

<table>
<thead>
<tr>
<th>Time</th>
<th>Stop</th>
<th>Sheet</th>
<th>Name</th>
<th>Journey Record No.</th>
<th>OS</th>
<th>YESNABY ORKNEY: Survey 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Experience

Visibility

Landscape

Weather: Warm, sunny, clear skies.

Note: The table above contains records of the journey from Yesnaby to Skall. The table includes columns for time, stop, sheet, name, journey record number, and OS. The landscape notes describe the weather conditions and visibility during the journey.
<table>
<thead>
<tr>
<th>Time</th>
<th>Landscape:</th>
<th>Visibility</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.36</td>
<td>Gently rolling field, bowl headed towards the burn (northeast) - the wet areas are highlighted by a mass of yellow flowers (?”Laciniata”)</td>
<td>What features are particularly noticeable? Are particular views obscured?</td>
<td>Briefly describe the nature of the location &amp; what your impressions are of both the place you have stopped and also the journey from the previous stopping point.</td>
</tr>
<tr>
<td>12.48</td>
<td></td>
<td>Bonwick hill is a ridge to my right (west) - the burn is the lowest point heading north; Cingle Field is partly hidden and ahead is just sky</td>
<td>A gentle saunter across a grassy field to get here - ahead is a clear opening in the ring of hillocks that surrounds the broch, in a bit of a dip here but looking back the broch is still visible in the skyline - sticking up above the horizon and sea.</td>
</tr>
<tr>
<td>12.52</td>
<td>Out on the road/track, but this follows the bottom of the bowl of Broch. Produce to the right, recently scoured fields ahead and in the left (north)</td>
<td>The landscape opens up here. The low point ahead is still visible but now only a field and the broch hill can be seen. Looking back the broch is still clearly visible.</td>
<td>Stopped to look at the flowers and gave a couple of lambs a quick boil. Otherwise just an easy walk alongside the burn – even though it hasn’t been disheched the old course is clearly visible. What seems to be a getting up.</td>
</tr>
</tbody>
</table>

**HY 22583** 164° 98° E-S
**Photos 9: 98-98**

**HY 22738** 162° 98° E-S
**Photos 9: 99 - 103**
Appendix 3: Journey Records – Yesnaby-Skall

<table>
<thead>
<tr>
<th>Time</th>
<th>Visibility</th>
<th>Landscape</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:05</td>
<td>Poor</td>
<td>No view</td>
<td>Poor</td>
</tr>
</tbody>
</table>

**Notes:**
- The journey from the previous stopping point was challenging.
- The visibility was affected by the weather conditions.
- The landscape was mostly barren and desolate.
- The experience was overall unsatisfactory.
<table>
<thead>
<tr>
<th>Stop</th>
<th>Start</th>
<th>Landscape:</th>
<th>Visibility</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:26</td>
<td>1:57</td>
<td>Gentle south facing slope; more pasture. Still indicated by remnants to north and south but more open here. HY 22418 15012 4Y.Gr. Photos: 9.108 - 118</td>
<td>Road is obviously man hidden. Its eye is drawn across the other side of the valley towards the location of the bungalow, Peene Hill etc. The mid/post-medieval settlement is also very clear.</td>
<td>A lot of enging fences as in the way of the path I wanted to choose... The route to the prominent looks pretty much like it should be straight ahead...</td>
</tr>
<tr>
<td>1:40</td>
<td>1:49</td>
<td>Rough grass and much more aware of being near the cliff. HY 22148 15818 4Y.Gr. Photos: 7:114 - 116</td>
<td>Looking back the lot of Benwee seems to have blended with that of Scettr. A gentle bend of land to the east now much of it peaty - can see two of the burnt mounds and the bough laps and feels very close.</td>
<td>At this point it becomes clear that a big day-leg is required on the route on the western of Blegging prevents a direct route. In order to avoid it's a route aiming for the headland to the south would have been needed...</td>
</tr>
<tr>
<td>Experience</td>
<td>Visibility</td>
<td>Landscape</td>
<td>Time</td>
<td>Name</td>
</tr>
<tr>
<td>------------</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Journey Record No: Journey Records – Yesnaby – Skaill</td>
</tr>
<tr>
<td>Time:</td>
<td>2.16 - 2.21</td>
<td>2.22 - 2.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stop</td>
<td>Start</td>
<td>Stop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.16</td>
<td>2.21</td>
<td>2.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.22</td>
<td>2.34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visibility:</td>
<td>As previous entry really - I know the sea is behind me (up slope) but isn't visible unless I walk up to the edge.</td>
<td>Everything ahead is grassy slope. To the north a sequence of jagged cliffs. Heading back in land I can see the remant and storm beach beyond which is the previously described bowl of land.</td>
<td>Photo 9:121 -125.</td>
<td></td>
</tr>
<tr>
<td>Experience:</td>
<td>Briefly describe the nature of the location &amp; what your impressions are of both the place you have stopped and also the journey from the previous stopping point.</td>
<td>A brief if fairly steep few steps down and then up the other side - looking to the south briefly at the pond/loch. A very slight bank enhances the edge of this inner scarp.</td>
<td>Photo 9:121 -125.</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>Visibility</td>
<td>Landscape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
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<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

- After the journey from the previous stopping point, impressions of both the place you have stopped and the journey itself are described, focusing on the nature of the location and what you have observed.

- Particular views observed
- Vegetation, Topography, etc.

<table>
<thead>
<tr>
<th>Time</th>
<th>Weather</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- HW 21857 15176 2416
- Road. Looking north can get up to 100% of the height.
- The way to think about the topography and the sky can be imagined.

- Yesnaby, Skaill S.
APPENDIX 4: JOURNEY RECORDS – EYNHALLOW SOUND

Note that all participants in the field survey have given their approval for the details of their experiences to be included in this research.
<table>
<thead>
<tr>
<th>Time</th>
<th>Landscape</th>
<th>Visibility</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:18</td>
<td>CATTLE ORCHARD SWAMP ON SW OF N. MORE</td>
<td>VIEW TO N. HIDDEN BY SLOPE + N. MORE, CANNED BY SLOPES TO LEFT S AND SE ALONG SMOKE</td>
<td>SEA IS MORE DOMINANT; MORE FEELS VERY-close AND SIGNIFICANT AND NOT REALLY SEPARATED EVEN THOUGH IT IS</td>
</tr>
<tr>
<td>2:20</td>
<td>BED BETWEEN N. MORE + MIDMORE; ROSEL PATRIAL ABOVE THE ROCK SLOPE + STORM BENCH</td>
<td>SUBMERGED MIDMORE DOMINATES, FEELS LOW DOWN, HILLS SLOPE UP TO NE AND TOWARDS NORTH MORE</td>
<td>SMELL OF THE SEA FEELS SOMEWHAT SUSPICIOUS TO BE APPROACHING THE BROUGH FROM THIS DIRECTION!</td>
</tr>
<tr>
<td>2:25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:28</td>
<td>SWEEPING INTO MIDMORE BURYING THE EDGE OF THE BANSHET + THE BED WASHED THIS HAVE BEEN POSSIBLE IN THE NW</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix 4: Journey Records – Eynhallow Sound
<table>
<thead>
<tr>
<th>Experience</th>
<th>Visibility</th>
<th>Landscape</th>
<th>Name</th>
<th>Date: 05/05/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop: Street: 8</td>
<td>8 Topography, Vegetation etc</td>
<td>Weather: Cool, Cloudy</td>
<td>John</td>
<td>Journey Record No: CO1 (A5xA2)</td>
</tr>
<tr>
<td>Time:</td>
<td>Landscape:</td>
<td>Visibility</td>
<td>Experience</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>3:20</td>
<td>Clambered across the pathway built last year over the Saltee area - must be similar to the 'causeway'. Julie E. noted and that is visible in the path.</td>
<td>On the edge of the Fig, can't see the sea at all from here. Howe clearly visible. Small, brown and midbrown, mostly obscured but presence is noted. Flat views along the sound to the south.</td>
<td>Chilly, tentative footing on the path. I know the sea is close but not really feeling it. Feels and smells sooty. All the undergrown is so much lower than in the summer.</td>
<td></td>
</tr>
<tr>
<td>3:30</td>
<td>Knoll of sandizo, between beach and land!</td>
<td>Big Fig views! North Howe and midbrown, sea, shore, sand, seagrass - the shoalery.</td>
<td>Chilly but good to see at the end even if we poor have come to spoil the slightly the lustrous lay. Goal to pop along to Clonreeve for a quick photo.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4: Journey Records – Eynhallow Sound

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### Appendix 4: Journey Records – Eynhallow Sound

<table>
<thead>
<tr>
<th>Time</th>
<th>Landscape</th>
<th>Visibility</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:20</td>
<td>Flat mown grass on edge of sea</td>
<td>Sitting at entrance to Midhove Beach: Cant see much of the plateau and hills behind. Looking towards all the bedrock on the coastal edge it all merges together. Eynhallow looks different from last stop. Can't see the big rock view along the coast now.</td>
<td>Sitting at Midhove Beach. The journey was a lot more difficult from last stopping point. This area is beautiful but has been obviously managed so it doesn’t feel quite right. The beach at Nether Hough doesn’t look quite as impressive from here as well.</td>
</tr>
<tr>
<td>14:37</td>
<td>Flat flags by edge of sea</td>
<td>The windmills, sea and Eynhallow are very visible. Again cant see hill or plateau. Midhove is obscured by cloud.</td>
<td>Sitting on a stone by the sea edge. As I have been walking a rain shower has moved in along Eynhallow Sound and obscured the mainland. And the smell has changed.</td>
</tr>
<tr>
<td>14:51</td>
<td>Stopped at the kirk with short grazed grass, gentle slope down to the sea.</td>
<td>As I am Sheltering behind the wall of the kirk. Cant see much of the surrounding landscape. Cant really see Eynhallow or much of the sea.</td>
<td>Sheltering behind wall of the kirk. Feels like we’ve travelled away from the Iron Age and into Viking and Medieval period. The journey from last point is here has been沿着 the shore.</td>
</tr>
</tbody>
</table>
### Appendix 4: Journey Records – Eynhallow Sound

<table>
<thead>
<tr>
<th>Experience</th>
<th>Visibility</th>
<th>Landscape</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Crossroad, Barra and Paps
- Stop. Loch Frellan. Cliffs to the south. Loch Frellan from east.
- Look out to sea. What is that island? A marked hill.
- Crossroad now. Lovely, the coast. All sound and very lovely.

<table>
<thead>
<tr>
<th>Time</th>
<th>Start</th>
<th>Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Sharp features on the horizon.
- Very close to Pringay and very lovely.
- Residual musk at the shore. Good view of the island. Again, me hill.
- The new 2 story house, etc.

**Survey Area:** Weisnass - Rousay

**Journey Record No:** CO2 (Harbour)
<table>
<thead>
<tr>
<th>Stop</th>
<th>Start</th>
<th>Landscape</th>
<th>Visibility</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:04</td>
<td>North head - wind. short grass etc</td>
<td>What features are particularly noticeable? Are particular views obscured?</td>
<td>Briefly describe the nature of the location &amp; what your impressions are of both the place you have stopped and also the journey from the previous stopping point.</td>
<td></td>
</tr>
<tr>
<td>14:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:20</td>
<td>Low cloud. sun light.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:26</td>
<td>Cloud.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:30</td>
<td>Flags below bank. Eynhallow sound.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:35</td>
<td>Sea at exit side of bank.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Survey Area: Eynhallow Sound*

*Journey Record No: 003*

*Date: 3.5.2012*

*Name: Rik Hammond*

*Sheet: 1 of 2*
<table>
<thead>
<tr>
<th>Time</th>
<th>Experience</th>
<th>Visibility</th>
<th>Landscape</th>
<th>Topography, Vegetation etc.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:42</td>
<td>First seen from land.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11:45</td>
<td>Started to move slowly.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11:49</td>
<td>First seen fully.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11:51</td>
<td>Area of land ahead.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11:55</td>
<td>Approaching, no.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11:58</td>
<td>Coastline clear.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12:00</td>
<td>Area to right.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:05</td>
<td>Area to left.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:10</td>
<td>Area to back. Not in view.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Survey Area: G53 (1000 by 2000 ft.)
Journey Record No: 032 (100204)
Weather: Cloudy.
Survey: 3/05/12
Name: M.N.