Art and Architecture in Neolithic Orkney
Thomas, Antonia

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The Neolithic sites of Orkney include an impressive number of stone-built tombs, ceremonial monuments and – uniquely for northern Europe – contemporary dwellings. Many of these buildings survive in a remarkable state of preservation, allowing an understanding of the relationship between architectural space and the process of construction that is rarely achievable. Until recently, however, relatively little has been known about the decoration of these sites.

This book addresses that gap to offer a groundbreaking analysis of Neolithic art and architecture in Orkney. Focussing upon the incredible collection of hundreds of decorated stones being revealed by the current excavations at the Ness of Brodgar, it details the results of the author's original fieldwork both there and at the contemporary sites of Maeshowe and Skara Brae, all within the Heart of Neolithic Orkney World Heritage Site.

It provides the first major discussion of Orkney's Neolithic carvings, and uses these as a springboard to challenge many of the traditional assumptions relating to Neolithic art and architecture. By foregrounding the architectural context of mark-making, this book explores how both buildings and carvings emerge through the embodied social practice of working stone, and how this relates to the wider context of life in Neolithic Orkney.
University of the Highlands and Islands Archaeology Institute Research Series : 1

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This book contains the results of my PhD research undertaken between 2011 and 2015 at the Archaeology Institute, University of the Highlands and Islands, and awarded by the University of Aberdeen (Thomas 2015). My research at the Archaeology Institute greatly benefitted from the encouragement and kindness of my supervisors, Professors Jane Downes and Mark Edmonds, and their support has been invaluable in bringing this project to fruition. It was made possible because of the generous funding of a doctoral studentship award from the Arts and Humanities Research Council and I am grateful for their backing.

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Above all though, this book would not have been imaginable without the continuing love and support of Daniel and Lucie Lee. It is dedicated to you both.
LATE FEBRUARY 1925, BRODGAR FARM, STENNESS

It had already been a long, hard winter. Like all Orkney farmers, James Wishart was keen to get on with the business of getting his field ploughed, harrowed and sown for the next season’s silage crop. But his field contained rather a lot of sizeable and awkward stones, which would have to be removed before they damaged his plough. Wishart had pulled out a good number when one in particular caught his eye: a large flagstone slab which was strikingly carved along one of its edges, with patterned bands not unlike a Fair Isle sweater. He had to dig around the stone to remove it, and more objects soon caught his eye: two balls of stone, just bigger than his fist and smooth like beach pebbles. But there was ploughing to be done, and the field wouldn’t clear itself of all these rocks. Wishart placed his finds by the dyke, and carried on. He was little interested in old stones, carved or not, and there was work to be done. But he thought he would mention the matter to his neighbour Peter Leith, who liked to look at such things.

Leith had a keen knowledge of local history and archaeology and happened to be one of the few people in the West Mainland who owned a camera. He came round straight away. He placed the slab on top of a roll of barbed wire in the farmyard, set up his tripod and plates, and looked through the viewfinder. When Leith and Wishart had examined the stone, the carved lines really stood out, and if the light caught them just right, they were as clear as if they had been painted. But now, through his camera lens, they were really quite hard to see. Peter had an idea: there was a stick of chalk in his pocket, and he rubbed it along the markings, blowing away the excess until the lines were obvious again. When he developed his glass-plate negatives the next day, he was happy enough. The exposure of the sky wasn’t quite right, but the stone was just as he wanted it, and the chalked in carvings were as clear as day.
1. INTRODUCTION

Figure 1. Photograph of the Brodgar Stone taken by Peter Leith in 1925 (reproduced with the kind permission of Peter Leith).
IMAGES AND ARTEFACTS

In April 1925, two months after James Wishart discovered the Brodgar Stone, the news finally found its way to James Marwick, Provost of Stromness. He rushed round to the farm, but the place where it had been pulled from the field was no longer visible. Propped up against the wall in the barn, he found what he had come for: the large slab with its ‘curious marks’. He requested a print of Peter Leith’s photograph of the Brodgar Stone, and used it to illustrate his report on the find for the Proceedings of the Society of Antiquaries of Scotland (J.G. Marwick 1926). The following year, at Marwick’s suggestion, the Brodgar Stone was purchased for the National Museum in Edinburgh. An image was commissioned from Tom Kent, a local professional who specialised in - amongst other subjects - photographs of artefacts and archaeological sites. Kent’s studio for the shot, like Peter Leith’s, was en plein air, but he substituted the roll of barbed wire for a more photogenic wooden barrel. This time the lines didn’t need to be chalked in. The sunlight was at just the right angle to give the necessary contrast, raking across the edge of the slab, showing the carvings perfectly.

I have long been fascinated by this photograph of the Brodgar Stone. It shows an artefact of the Neolithic but is an image of 1920s Orkney. This was a time of intense local interest in archaeology, and over the next decade an incredible number of Neolithic sites were opened up and recorded. Principal amongst these was the work of V. Gordon Childe at Skara Brae, and his legacy continues to dominate studies of the Orcadian Neolithic. It was Childe who first recorded carvings on the walls of Skara Brae, noting that ‘the nearest parallel is to be seen on the slab near a cist at Stennis [sic]’, i.e. the Brodgar Stone (Childe 1930, 184). Until the discoveries at the Ness of Brodgar, the site contained the largest assemblage of architecturally-situated art in Britain, but its domestic context frequently excludes it from discussions of Neolithic art (e.g. Nash 2012, 137), highlighting an unhelpful dualism between ritual and domestic that continues to be prevalent in archaeology.

An examination of the way the Brodgar Stone has been presented exposes other assumptions. The slab has been illustrated and discussed several times, but ever since Peter Leith chalked in the lines for his photograph, only its incised marks have received attention. Yet in places these are accompanied by crude but deliberate pecking: a cup-mark is ground into an incised band, a roughly-pecked pattern overlying a further incised band. Perhaps the incised slab was re-visited, or even defaced with this pecking, or maybe it was always part of the design. There are subtle complexities to the stoneworking which have been overlooked.

**Figure 2. The Brodgar Stone photographed by Tom Kent in 1926**
*(reproduced with the kind permission of Orkney Library and Archives).*
This observation forms a springboard for many of the ideas in this book. If a design can be altered or augmented, it indicates that any meaning which lies behind the decoration is not fixed. As we will see in Chapter 2, this runs counter to many archaeological narratives, which assume that ‘rock art’ has a meaning (always singular) that has to be seen and ‘read’. At the heart of the problem is the static and monosemic way in which both art and architecture tend to be treated in archaeology. Despite encompassing an incredible diversity in both process and context, Neolithic rock art is consistently discussed in terms of its superficial visual appearance and form. Studies of prehistoric architecture have been remarkably similar. Neolithic buildings are often treated as ‘ready-made’, with the focus on their assumed ‘final’ form at the expense of interest in how they came to be built, modified and occupied over time. This approach is particularly persistent in discussions of Neolithic buildings in Orkney, as a result of the apparent perdurance over millennia of its stone-built architecture. At a range of scales, from the monumental to the artefactual, form has been prioritised over process in discussions of Neolithic art and architecture. This is largely, of course, because of the way in which sites appear to us. Buildings are frozen at the time of their discovery, whilst decorated stones are frequently removed and placed on display in museums. Rarely are we given the opportunity to look beyond the surface to explore the processes by which stones might have been decorated, placed and appreciated in context.

My work takes a different approach to Neolithic art and architecture. Focussing upon the Heart of Neolithic Orkney World Heritage Site, this book details the results of original fieldwork at the three sites of Maeshowe, Skara Brae and the Ness of Brodgar. This combines the re-interpretation of known examples of architecturally-situated carvings with new survey and excavation work, leading to the discovery of many previously-unrecorded examples. By taking a process-led approach, this research discusses how stone, and the way that it was worked, decorated, placed and appreciated, was fundamental to the way that Neolithic Orcadians understood themselves and their world.

BACKGROUND TO THE RESEARCH

We now know that the Brodgar Stone came not from a Bronze Age cist, but from an extraordinary complex of Neolithic buildings known as the Ness of Brodgar. The ongoing excavations directed by Nick Card of the Orkney Research Centre for Archaeology, UHI Archaeology Institute have now produced over 7001 dressed and decorated stones from the site, many of which come from secure Neolithic contexts and in situ structural elements. I have worked at the Ness of Brodgar since 2006;2 my primary observations during these excavations form the backbone of my research.

The insight that this involvement has allowed is both timely and crucial. Excavation exposes aspects of the architecture which normally remain hidden, and allows the recording of decoration and stoneworking in situ, and as they are first revealed during excavation. The fragility of the exposed stonework means that surfaces often laminate away after one or two seasons of fieldwork; coupled with the ephemeral nature of many of the marks, this means that if the decoration was not actively recorded during excavation, it might not be noted at all. At the Ness of Brodgar, decorated and dressed stones have been found across the site, and were deposited at each stage of the construction process. The dismantling of buildings through excavation thus affords an exploration of how stone was worked and decorated as part of construction and occupation. It takes the discussion beyond the surface and allows us to engage with the question of when particular stones might have been carved. This allows an exploration of the temporality of appreciation of different carvings, an aspect further highlighted by the identification of different phases of attention in many of the stones. A variety of stoneworking practices are in evidence, and include incising, carving, pecking, pick-dressing, chiselling, grinding and cup-marking. These all have their own rhythms of engagement, but are not mutually exclusive; like the Brodgar Stone, several stones are incised, then carved or pecked. This diversity belies a catch-all designation of art, and the purely visual consumption that this term implies, and indicates that the process of working was a significant characteristic.

Parallels can be drawn with carvings found elsewhere in Britain and Ireland, but the Orkney pieces form a distinctive group of their own and it is necessary to explore how this stoneworking and decoration operated within the wider context of the Orcadian Neolithic. Looking beyond superficial characteristics opens up the analysis to include the materiality of the stone and this form an important sub-theme in this book. This takes the discussion beyond the sites themselves into the wider landscape and the materials which constitute the buildings under discussion. The discovery of large numbers of in situ stones from the Ness of Brodgar, from secure Neolithic deposits, also permits an assessment of comparable carvings from across Orkney. This demolishes any doubts about the authenticity of decoration elsewhere and allows for the identification of ‘new’ and previously unappreciated forms of stoneworking, even within the well-studied sites of Maeshowe and Skara Brae. A fresh programme of survey work undertaken for, and reported in, this thesis, alongside a re-examination of previously recorded material from those sites, has revealed that

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1 As of 2015.
2 As a Project Officer for the Orkney Research Centre for Archaeology (ORCA), I worked as a supervisor in Trench J and N in 2006 and 2007, and Structure 10 in 2008-2011. Between 2012-2014 I was on site to undertake my PhD research.
the stones used in these buildings were also subject to a diverse range of different, often very subtle, and largely overlooked forms of attention.

MEthodology

This book is based on the analysis of primary data in the form of in situ decorated and dressed stone at Maeshowe, Skara Brae and the Ness of Brodgar, and material removed from the latter two sites. At the Ness of Brodgar, my involvement in the excavations has allowed an in-depth study. All 548 decorated and dressed stones recovered between 2006 and 2013 were recorded, many as they were first revealed. Work at all three sites comprised archaeologocal (drawn, written, photographic) work and archival research. The same basic metholodology was followed throughout, and is discussed below, but the specific exigencies of each site required their own approach and these are detaied in the appropriate chapters.

Survey of in situ stonework

Primary survey at all sites comprised an initial visual inspection of all areas of stonework, to identify both previously-recorded stoneworking and decoration and look for ‘new’ examples. Initially, every accessible Neolithic tomb or house in Orkney was examined for carvings. Several previously unidentified markings were recorded in the tombs at Wideford, the Holm of Papa Westray South, Cuween and Quoyness, but space precluded their inclusion here. Likewise the carvings from the houses revealed in the ongoing excavations at the Links of Noltland are likely to form an important source of comparison in the future, but are not included here.

The current study instead focusses on the three main sites of Maeshowe, Skara Brae and the Ness of Brodgar. I have recorded 30 examples of incised decoration of likely Neolithic date within Maeshowe, 19 of which were not previously noted. Of the 75 examples of in situ decoration at Skara Brae, 24 have been recorded for the first time by my survey. Many of these were only visible at a very close range (often a couple of centimetres). At both these sites, all visible areas of stonework were examined in detail, but the survey was unavoidably largely restricted to the surface. At the Ness of Brodgar, however, stones could be examined as walls were being dismantled, leading to the discovery of many stones with ‘hidden’ decoration. The interpretation of their placement forms the focus for many of the case studies in this thesis.

Written records

Historic Environment Scotland supplied 1:100 elevation drawings in AutoCAD, based upon photogrammetric surveys, of the interior stonework of Maeshowe and Skara Brae. These formed base drawings for annotation during my survey. All decorated and dressed stones were given a unique number specific to my fieldwork. At the Ness of Brodgar, each stone with identifiable working or decoration was assigned a unique Small Finds (SF) number and located in three dimensions in situ by Total Station or GNSS. A pro forma Decorated Stone Recording Sheet was used to record each stones’ characteristics (Figure 3).

Photography

All 196 decorated or dressed stones in situ on walls and other structural elements at Ness of Brodgar at the end of 2013 were photographed in a range of lighting conditions. The difficulty of taking photographs of individual stones on a busy, working excavation was compounded by the exposed nature of the site and the strong light of the Orcadian summer. Just as Peter Leith and Tom Kent had realised 80 years previously when they photographed the Brogdr Stone, I found that the visibility of the incised marks was shifting and variable. As the sun moved throughout the day, previously unseen carvings would suddenly become illuminated, before passing into shadow and becoming invisible again; standing walls here, and in the exposed areas of Skara Brae, required examination and recording at various times of the day. Within the enclosed space of Maeshowe, the roofed passages and House 7 at Skara Brae, standing walls were examined under controlled dark conditions using a raking light from a LED strip and photographed under a long exposure.

Thirty-six stones have been removed from Skara Brae to various museums and stores (see below). With the exception of four which were not seen, all were examined in detail and photographed in their current locations under variable conditions (Chapter 5).

Apart from 21 unstratified, and 18 stratified, stones which were unable to be moved due to their size, I photographed all decorated and dressed stones removed from the Ness of Brodgar 2006-2013. This was undertaken in a studio at Orkney College and stones were illuminated by ‘painting’ light from a LED strip at raking angles across the carvings on variable exposures using a Nikon D90 DSLR. A Macro lens was used where appropriate to identify and illustrate sequences of working. Several incised lines were only visible in detail when these photographs were enlarged. As such, the difficulty of photographing and even seeing the incised lines, both on site and in the studio, allowed an exploration of not only their visibility, but also how light interacts with the markings, and how this mutability might have been a significant characteristic in the Neolithic (Chapter 7).

Drawn record

Detailed measured sketches of decorated stones were made both in my site notebook and on the pro forma...
recording sheets. Stones with solely pecked or cup-marked decoration were photographed but not drawn. Due to the contextual focus of my study, and the limited time available for recording, the markings on unstratified stones have not been illustrated with line drawings in the catalogues. Photographs of incised stones were subsequently rectified and, combined with the measured sketches, digitised in AutoCAD and Adobe Illustrator to produce the illustrations of the recorded incised motifs.

**Databasing**

At the Ness of Brodgar, all decorated and dressed stones recorded between 2006 and 2013 were catalogued using the SF numbers issued on site. The full catalogue of these can be found in Volume 2 of my thesis (Thomas 2015) but is not reproduced here. A detailed database, comprising 56 different attributes, including XY coordinates was compiled in Excel, and imported into ArcGIS with a geo-referenced base plan of Trench P. This then provided a searchable distribution plot that was used to analyse depositional and spatial patterns across the Trench P structures. Many of these are illustrated as distribution plots and form the basis for many of the interpretive discussions in Chapters 6-9.

Seventy-seven decorated stones were recorded in 2014; these fall outside of my data collection period but are referred to within the text when appropriate. Decorated stones found at Ness of Brodgar during 2015 are discussed where relevant. The same attributes were used to record the decorated stones at Maeshowe and Skara Brae, but their small assemblage sizes preclude meaningful statistical analysis and these were not analysed in ArcGIS.

**Museum-based research**

The National Museum of Scotland in Edinburgh holds most of the material recovered from Childe’s and Clarke’s excavations at Skara Brae. Decorated stones within these assemblages were examined and recorded in January 2012 and September 2013. Other pieces from Skara Brae are in the site’s Visitor Centre where they are displayed alongside several pieces on loan from Stromness Museum, which holds many of the items donated by William Watt. Other decorated architectural stones from Skara Brae are currently stored by Historic Environment Scotland in Kirkwall. These were all examined in July-August 2013.

**Archival research**

Throughout my research, I have been fortunate to have full access to the Ness of Brodgar site archive. Further information on stratigraphy, dating and interpretation was obtained through conversations with Nick Card, the Site Director, and the excavation team. Archival research relating to Maeshowe and Skara Brae was undertaken at the National Monuments Record Service in Edinburgh, which holds a substantial collection of unpublished photographs, reports, notes and illustrations relating to these sites. These include copies of Gordon Childe’s excavation notebooks, the photographic archive relating to Childe’s excavations at Skara Brae, and RCAHMS drawings and photographs dating back to the 19th century. The Tom Kent Photographic Archive, housed by Orkney Library and Archive, contains many images of the site during Childe’s excavations and has been another essential resource.

**THE STRUCTURE OF THIS BOOK**

This thesis started with the story of the Brodgar Stone. I argued that examination of the way in which it has been represented reveals more than just a **snapshot** of one particular moment. In Leith’s and Kent’s photograph, this Neolithic stone becomes an artefact of the 1920s, and as a representation it continues to be influential today. The Brodgar Stone had already experienced a complex biography in the Neolithic, comprising several stages of marking and alteration, yet only one of these stages – the incising – has ever received any attention. Like the photograph itself, therefore, there are **befores** and **afters** in the story of the Brodgar Stone (cf. Plummer 2012).
By taking a broadly biographical approach, this thesis will explore the *befores and the afters* in the wider assemblages of Neolithic art from Maeshowe, Skara Brae and the Ness of Brodgar. This allows an exploration of how buildings and carvings emerged through *process*, and how the *temporality* of the working, decoration and appreciation of particular stones relates to the wider *context* of life in Neolithic Orkney.

Chapter 2 follows this Introduction and discusses the way in which prehistoric art has been treated in archaeology and introduces the wider context of Neolithic art and architecture in Britain and Ireland. Neolithic Orkney becomes the focus of the discussion in Chapter 3, which lays the foundation for the discussion of Maeshowe, Skara Brae and the Ness of Brodgar in Chapters 4, 5 and 6. These chapters present primary data relating to those sites, drawn from both my fieldwork at those sites, and my re-assessment of existing material. This has allowed new and original interpretations to be drawn and forms the basis for the case studies discussed in Chapters 7, 8 and 9. These are focussed around the interlinked themes of *Process, Temporality and Context.*
2. ART, ARCHITECTURE AND ARCHAEOLOGY

Figure 4. SF7530 on display at the Pier Arts Centre, Stromness, January 2011. Image © Antonia Thomas
INTRODUCTION

This book discusses the deliberate marking of stone found in architectural contexts in the Orcadian Neolithic. This is a variation of a phenomenon found throughout Atlantic Europe from the Early Neolithic to the Bronze Age. Although often having techniques and designs in common, this is generally split into two groups: open-air rock art, and megalithic or passage grave art. Rock art is ‘human-made marks on natural, non-portable rocky surfaces’, within an open-air, landscape context (Taçon and Chippendale 1998, 6). Megalithic art is generally used for ‘carving or painting executed on the structural elements of megalithic tombs’ (Shee Twohig 1981, 11). Although other authors prefer ‘passage grave art’ (Shee 1973) or ‘passage tomb art’ (O’Sullivan 1986), the defining characteristic is its architectural, rather than landscape setting (Bradley 2009, 98).

In Neolithic Orkney, there are no known examples of landscape-situated rock art; all known carvings are found within architectural contexts. Moreover, decorated stonework is found in both passage graves, and in contemporary dwellings. These latter settings are not considered megalithic, and cannot be ‘passage grave art’, so the context-neutral terms of ‘mural art’ (Powell and Daniel 1956, 41), or ‘parietal art’ (Robin 2008, 14) may be more appropriate. Certainly the rigid definition of ‘megalithic art’ as a phenomenon which is exclusively found within a burial context, creates a paradox whereby otherwise identical, and contemporary, forms of stone treatment are classed differently, according to a distinction between ‘ritual’ and ‘domestic’ (e.g. Nash 2012, 129). This is despite the established acceptance of this dualism as a modern construct, which may be meaningless when applied to prehistory (e.g. Lane 1986, 181-182; Brück 1999; Bradley 2005, 28-30).

In relation to ‘ritual’ or funerary activities and settings, however, art is happily - but no less problematically - used as an umbrella term for a whole range of practices. The notion that all prehistoric carvings possess a ‘magico-religious’ significance (Childe 1931c, 153; Daniel 1954, 9) accessible to only a few persons is remarkably persistent, but rarely interrogated. Such interpretations may be rooted in understandings of contemporary European visual culture (O’Connor 2007, 183) which has often held that art belongs to an ‘inexplicable, almost magical sphere to be venerated’ (Pollock 2009, 29). The term transposes modern assumptions onto past circumstances that were very different from our own world (Barrett 1990, 15; Jorge 1998, 72; Bradley 2009, 4). A central problem concerns how far art can be considered a universal, cross-cultural phenomenon (Morphy 1994; Sparshott 1997), when even in our own society, the definition of ‘art’ and ‘non-art’ does not remain static, but changes with fashion and ideology (Layton 1991, 4; Cochrane 2006, 53; contra Bahn 1998).

Nevertheless, in the absence of a suitable alternative I continue to use the term art in this book and would ask, following Richard Bradley that ‘from here on the reader must imagine it is enclosed by inverted commas’ (2009, 4; although see Cochrane and Russell 2007, 5). That is not to say the term is not problematic, but that alternative appellations such as ‘visual culture’ (Cochrane 2006) merely replace one loaded term with another (cf. Bradley 1997a, 4-5), and still assume visual consumption. For many of the Neolithic mark-making phenomena which are grouped together as art, visual appreciation appears not to have been a consistent concern, so we must look beyond such unitary assumptions and interpretations to explore context (Hensey 2012).

In this book I will explore the implications of these discussions for understanding the Orkney material, and how the particular affordances of excavation at the Ness of Brodgar allow a different perspective to be drawn. In this chapter I explore how anthropologists and archaeologists have considered art, and the various forms of prehistoric mark-making designated as art, before presenting the wider context of Neolithic carvings in Britain and Ireland.

A BRIEF HISTORY OF ART (IN ARCHAEOLOGY)

The problematic nature of art is exposed by the way in which archaeologists, art historians and anthropologists have approached similar material. This can be clearly seen in relation to some of the earliest examples of art known: Palaeolithic cave paintings.

Art history and archaeology

This particular history of art opens with a familiar account. In 1879, a young girl exploring with her father in northern Spain, crawled through an opening in the ground and found herself in a cave whose ceiling was covered with a fabulous array of painted animals (Bailey 2010, 8; see Figure 5). The discovery of Palaeolithic cave paintings in Altamira was published the following year and caused an international outcry. They were immediately declared a hoax, because of incredulity that ‘primitive’ Palaeolithic people were capable of such sophisticated work (ibid.). In the 19th century, art, like religion, was a tool of cultural relativism, a primary characteristic of the most developed societies which distinguished the civilised Europeans from ‘primitives’ (Morphy 1994, 648; Moro Abadia 2006, 124).

Within fashionable evolutionary theory, such as that espoused by Morgan (1877) the whole of humanity was on a one-way trajectory of progress from savagery to civilisation (Chapter 8). If societies could be organised along this scale, then so could their art (Bradley 2009, 5). The ‘surprising and exciting fact’ (Daniel 1954, 8) of their date made the cave paintings problematic. The
depictions in Altamira appeared in many ways more sophisticated than the art of the advanced civilisations of ancient Egypt (Moro Abadia 2006, 128), and even ‘showed a disquieting resemblance to the accepted conventions of nineteenth-century painting’ (Bradley 2009, 5). Advocates of evolutionary schemes found the idea that such primitive images could be related to prehistoric religion equally hard to swallow (Morphy 1994, 648). Even when the paintings were proved authentic, many archaeologists preferred to discuss them in secular terms, as ‘art for art’s sake’, and the caves themselves became discussed as ‘galleries’ (Bradley 2009, 6-7). It is no coincidence that these ideas were contemporary with the growth of museums and the discipline of art history which saw ‘fine art’ emerge as an institutional concept (Morphy 1994, 653).

**Anthropology and art**

The authenticity of the Altamira paintings became accepted at the turn of the 20th century when comparable examples were found elsewhere in Spain and France (Bailey 2010, 8) and the making of art came to be seen as a form of expression as old as humanity itself (Goldhahn 2010, 106). At the same time, there was increasing disillusionment with evolutionary schemes, as the nascent discipline of social anthropology was recognising the complexity of modern day ‘primitives’ (Moro Abadia 2006, 130-131). Studies of indigenous societies, especially in Australia (e.g. Spencer Baldwin and Gillen 1899) inspired new research into ‘primitive religions’ and the role of art in ritual (Frazer 1894; Reinach 1903). These theories were applied to hunter-gatherer rock art across Europe, from Spain to the Arctic (Goldhahn 2010, 108). No longer just ‘art for art’s sake’, art became an expression of ritual, a notion enthusiastically taken up in archaeology by Henri Breuil, who interpreted the Palaeolithic paintings as evidence for a sympathetic hunting magic (Breuil 1952). The notion that prehistoric art – of all periods - was ‘magico-religious’ (Daniel 1954, 9) continues to dominate discussions today.

With the rejection of the evolutionary paradigm in the early 20th century, particularly in Britain, art fell out of favour in anthropology (Morphy 1994, 656). Art did not return to the fore in anthropology until the 1960s and ‘70s, with a series of important ethnographic studies, particularly amongst Australian Aboriginal groups.1 Many of these were influenced by structuralism, and

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1 The art of Aboriginal Australia is one of the longest continuous traditions of art in the world and dates back at least fifty millennia (Caruana 1993, 7). Nevertheless, whilst some Aboriginal paintings in the Arnhem Land predate those at Lascaux and Altamira, it tends to be the European images which accompany the opening discussions of art history texts (e.g. Gombrich 1994), whilst the Australian examples remain the preserve of anthropologists.
the idea that images and visual culture could operate – and be studied - in the same way as language (Bradley 2009, 30). In archaeology, Leroi-Gourhan argued that the images in Palaeolithic caves represented highly structured systems governed by the pairing of male/female signs (Leroi-Gourhan 1968). Anthropologists noted the language-like properties of the art of a wide number of indigenous groups, including the Walbiri of Central Australia (Munn 1973; Morphy 1994), the Yolngu of NE Arnhem Land (Morphy 1991) and the Abelam of New Guinea (Forge 1973). The insights afforded by participant observation meant that anthropology was able to challenge art historical approaches, and analyse not only intention on the part of the artists, but also the social functions of art (Layton 1996; Lowish 2009). Drawing upon Munn’s earlier study, Howard Morphy argued that despite appearing to be almost entirely abstract, Walbiri art contained many figurative elements and ‘signs’ that created a language-like system of meanings. These signs ordered relationships between different dimensions, depending upon context; so a circle could mean a hole, a tree, a dog, an egg or more (Morphy 1994, 661-662). Moreover, whilst the art of the Walbiri, Yolngu and Abelam could all be defined as having semantic properties, there are fundamental differences. In Walbiri and Yolngu art, the stories and places depicted in paintings can be precisely and consistently interpreted by the initiated. But in Abelam art, Forge argued that meaning was internal to the system rather than referential. Although elements of Yolngu and Abelam art could look almost identical, therefore, they could ‘mean’ very different things: ‘[s]imilarity of form across cultures may have no significance’ (Morphy 1994, 666). Context is crucial and as such forms a central tenet of my research.

For Morphy, art is something intended for presentation or representation and can be understood in terms of its semantic and/or aesthetic properties (1994, 655), a definition which was critiqued in some depth by Alfred Gell (1992b; 1998). For Gell, art was a ‘system of action, intended to change the world rather than encode symbolic propositions about it’ (Gell 1998, 6). Using the example of the elaborately carved canoe prows of the Trobriand islanders, Gell argued that the complexity of their decoration was intended to ‘dazzle the beholder’ and make the overseas Kula partners of the Trobrianders ‘take leave of their senses’ when they saw them (Gell 1992b, 44). The canoe prows were a ‘technology of enchantment’ which possessed the power to affect those who encountered them, and as such were indexes of agency (Gell 1998, 6). This was developed further in Art and Agency, published posthumously in 1998. Gell offered many illuminating insights for archaeology, particularly his propositions that art objects have no intrinsic nature independent of their relational context, and that visual images cannot be ‘read’ like a text, as only language has meaning in the intended sense (Gell 1998, 7, 164-165). Nevertheless, his approach was limited by his wholesale dismissal of other anthropological approaches to art (Bradley 2009, 40) and has been criticised for obscuring the role of human agency in artistic production (Morphy 2009, 6), and the part that cultural convention plays in shaping the reception of art objects (Layton 2003, 447).

These wider art historical and anthropological questions about art have had a significant impact upon discussions of Neolithic stoneworking and decoration in Britain and Ireland. Whether or not art can be considered a cross-cultural category, or if intention on the part of the artists can ever be discerned by outsiders, and whether images can be considered as representational, semantic, aesthetic, or indeed all or none of those things, are questions which resonate throughout this book.

**NEOLITHIC ART AND ARCHITECTURE IN BRITAIN AND IRELAND**

It is clear from the discussion in the previous section that there is no consensus about the nature of art in anthropology. This may be why it has been avoided in archaeology, perhaps ‘too enigmatic, subjective and risky’ a topic for serious analysis (Mazel et al. 2007b, 3). As such, for most of the 20th century, the archaeological study of open-air rock art in Britain and Ireland was largely the preserve of amateurs, with academic attention firmly focussed upon the more readily-dateable carvings within monuments (Bradley 2009, 12). Open-air rock art has however seen a resurgence in academic research and excavation in recent years (e.g. Barnett and Sharpe eds. 2010; A. Jones et al. 2011; Bradley and Watson 2012). At the same time, recent fieldwork in architectural settings across Britain and Ireland has demonstrated that even in well-studied sites, unrecorded carvings remain to be found (Bradley et al. 2000; Nash and Stanford 2007; 2010; Hensey and Robin 2011). Within this framework, the discoveries from the Ness of Brodgar – which contains the largest assemblage of architecturally-situated art in Britain – are especially timely. In this book, the focus is upon decoration in architectural settings in Neolithic Orkney, and the discussion of open-air rock art in Britain and Ireland is limited to examples which relate to the wider argument.

**Setting and chronology**

On mainland Britain and Ireland, Neolithic decoration is found almost exclusively in passage graves. These emerged in Iberia in the 5th millennium (Nash 2012, 131), subsequently extending firstly along the Atlantic façade into Brittany, and then as far as western Ireland and Orkney, Anglesey and the northwest of England (Figure 6).
Brittany contains the finest decorated passage graves in the region, with the monuments around the Gulf of Morbihan providing spectacular examples. Dated to the early-mid 4th millennium, Gavrinis is particularly heavily-decorated, with each of its passage and chamber uprights carved with elaborate abstract designs, many of which would not have been visible once built (Nash 2012, 133). The decorated passage graves of Le Déhus and La Gran’mère du Chimquière in Guernsey, and La Hougue Bie in Jersey can also be understood in relation to the Breton monuments and are not discussed in this chapter.

The earliest passage graves in Britain and Ireland are at Carrowmore, Co. Sligo, and comprise simple chambers enclosed by rings of boulders (Sheridan 2003). A central post-hole within the chamber at Tomb 7 in Carrowmore produced a date of 4330-3820BC (Cooney 2000, 132). The focal point of the complex was Tomb 51, the largest monument and possibly the only one covered by a cairn; built c. 3550BC it is also the only one with decoration (Bradley 2007, 100-101).

By the later 4th millennium, passage graves were found throughout north and central Ireland (Bradley 2007, 101), Anglesey (Burrow 2010) and Orkney (Schulting et al. 2010). Links have been drawn between Irish passage graves and Maeshowe-type tombs in Orkney on the basis of design, orientation and internal decoration (Eogan 1992, 123). Although there are regional variations, they all contain an entrance passage, usually low and narrow, leading to a chamber, frequently corbelled to allow a lofty inner space, often leading to side cells or recesses (Bradley 2007, 98). These are usually within a large sub-circular cairn, and in the Boyne Valley these tend to be revetted by a continuous kerb, which is frequently decorated (Cochrane et al. 2015). There appears to be a priority of ‘dexter over sinister’ in Irish passage graves, reflected in the relative size of the recesses on the right-hand side, and the distribution of artefacts, human remains and internal decoration (Herity 1974, 123). This spatial pattern has also been noted in Anglesey (Burrow 2006) and Orkney (Bradley et al. 2000), where it also extends to dwellings (Richards 1990). The basic scheme of passage, chamber and entrance remains stable over time, but there appears to be an increasing concern with the scale of the tombs, passage length and the complexity of the architectural layout, both in Ireland ( Sheridan 1985/6; Cooney 2000, 115) and in Orkney (Sharples 1985). In Britain and Ireland, the greatest density of decorated passage graves is found

Figure 6. NW Europe, showing the main areas of decorated passage graves. Image © Antonia Thomas, after Shee Twohig 1981, 12, Map 1 and Bradley 1997A, 41, Fig. 3.5 and using open-source map data licensed under Creative Commons.

Figure 7. Distribution of megalithic art and open-air rock art in Britain and Ireland. Image © Antonia Thomas, after Robin 2008, 236, Fig. 1.2 and Beckensall 1999 using open-source map data licensed under Creative Commons.
around the Irish Sea, and in particular in the Boyne Valley of Ireland, the ‘heartland’ of megalithic art (J. Thomas 2005, 170; see Figure 7).

Open-air rock art is found in most of the northern and western counties of England and Wales, southwestern Scotland, the Isle of Man and southwest Ireland. This is due both to the availability of smooth rock outcrops and significant systematic fieldwork in those areas over the last 30 years (Nash 2007b, 175). Only isolated examples are known from northern Scotland, including Shetland (RCAHMS 1946a, 87) but none in Orkney. Examples are known from northern Scotland, including Shetland (RCAHMS 1946a, 87) but none in Orkney. Open-air rock art is associated with upland routes, areas around springs and sheltered coastal inlets, and clustered around Neolithic ceremonial monuments (Bradley 2007, 97). In contrast to passage grave art, which includes angular and incised motifs and rarely employs cup-marks, open-air carvings frequently comprise pecked cup-marks, both singly and with one or more rings, or with tails/radial lines, in addition to spirals and rosettes (Cochrane et al. 2015).

The relationship between passage grave art and open-air carvings remains contentious. Many authors have focussed on relative chronologies, or have discussed megalithic art and rock art as two ‘styles’, one insular, one imported (Waddington 2007, 11). There may be patterns in motif, context and technique of execution, but both pecked cup-and-ring marks and incised motifs are now recognised as broadly contemporaneous, rendering arguments concerning chronological development of ‘styles’ redundant (O’Connor 2007, 184). At the Ness of Brodgar and Fylingdales, (see below), cup-marks and ‘passage grave art’ appear together in secure contexts. At Copt Howe in Cumbria, complex geometric designs which would not be out of place within a passage grave, appear on a ‘monumental’ outcrop (Sharpe 2007). The distinction between ‘styles’ of art is increasingly unsatisfactory as the body of known material becomes larger and more diverse (cf. Darvill and O’Connor 2005, 308). Cup-marks have been found in secure Early Neolithic contexts, including in the long barrow at Dalladies, Kincardineshire (Piggott 1972). Several Welsh dolmens are also cup-marked (Darvill and Wainwright 2003), although these could post-date the construction of the monuments. One of the stones in the boulder-built cist at Knappers, Dumbartonshire, was dressed and pecked with curvilinear designs prior to construction, and contained a burial associated with a late Neolithic Seamer axe (Ritchie and Adamson 1981). At Backstone Beck, Ilkley Moor, open-air rock art panels were associated with Grooved ware pottery (Edwards and Bradley 1999). It seems likely therefore that both open-air and architecturally-situated rock art in Britain and Ireland emerged in the mid 4th millennium and continued into the Bronze Age, with a peak in the Later Neolithic (Bradley 2009, 113; Cochrane et al. 2015).

Passage grave art in Ireland

There are over 300 passage graves known in Ireland, and these are frequently clustered into cemetery complexes (Herity 1974). The most well-known of these are in the Boyne Valley (Figure 8), and at Loughcrew (Figure 9), which together contain the richest concentration of megalithic carvings in western Europe with decoration known on around 18 and 14 sites respectively (Shee Twohig 1981, 94). Seven other passage graves (Carnanmore, Sess Kilgreen, Knockmany, Tara, Fourknocks, Seefin and Baltinglass) are also decorated, and various other carved stones may have originated from now-destroyed monuments (ibid.). The decoration of Irish passage graves has been extensively analysed (e.g. Shee Twohig 1981; O’Kelly 1982; Eogan 1986; O’Sullivan 1986, 1993) and is briefly discussed below.

The Boyne Valley sites

The Boyne Valley complex consists of three groupings of monuments - Knowth in the west, Newgrange at the centre, and Dowth in the east - each of which comprises a large central tomb surrounded by smaller, satellite tombs. The principal mound at Knowth is c. 80m in diameter and contains two opposing passage graves opening to the east and west, whose chambers almost touch in the middle of the mound (Shee Twohig 1981, 98). Knowth 1 east has a 30m long passage leading to a cruciform corbelled chamber and contains at least 36 decorated stones. Its western neighbour has a simple, lintelled chamber but is similarly decorated. The mound itself is surrounded by a kerb with 127 stones, many of which have elaborate ornament. Knowth contains the densest concentration of megalithic art in the Boyne valley, and by extension, in northwest Europe (Eogan 1986, 146-176). The main site contains at least 200 decorated stones, with a further 42 recorded in the 18 satellite tombs which surround Knowth 1. The principal motifs in the main tombs are serpentiform and curvilinear, with spirals and arcs common; in the satellite tombs a different style is evident and more angular designs as well as incised motifs appear (Shee Twohig 1981, 100). Pecked designs predominate, but a recent survey at Knowth has found a large number of incised motifs that had previously been overlooked (Elizabeth Shee Twohig, pers. comm.) A particular feature of the decorated stones at Knowth is sequential superimposition, with incised motifs forming the earliest form of attention and which are frequently later infilled with pecking (Eogan 1997, 222).

Newgrange is a cruciform tomb accessed from the SE of a massive, 80m diameter mound and was excavated by Michael O’Kelly between 1962 and 1975 (O’Kelly 1982). Its passage is almost 19m long and contains 17 decorated orthostats, whilst its kerb contains 42 decorated stones.
Figure 8. Examples of carvings in Boyne Valley passage graves, from Simpson 1867, Plate XXIX. Reproduced with kind permission of the Society of Antiquaries of Scotland.
A further 10 roofstones and 21 stones in the corbelled chamber are also ornamented (Shee Twohig 1981, 100; O’Kelly 1982). Ten further carved kerbstones were found during development work (Shee Twohig 2000, 97). The ‘entrance stone’ is particularly striking and is extensively decorated with spiral and lozenge designs (Figure 8). Many other large stones in the tomb have pecked spirals, and lozenges, with zigzags and triangles also featuring heavily. Its internal decoration is comparable to Gavrinis, and Newgrange has been discussed extensively. Many stones were pick-dressed before carving, and incised lines frequently underlie pecked motifs. There are thus sequences of attention which find a parallel with some of the Orkney material, which will be discussed further in Chapters 3 and 8. One of the decorated corbels had been used for axe-polishing (op. cit., 183). The three satellite tombs contain stones decorated with incised and pecked motifs (Shee Twohig 1981, 101).

Dowth’s principal mound has a diameter of c. 85m and contains two passage graves in its western half. Dowth north has a 10m long passage leading to cruciform chamber and Dowth south has a short passage leading to a large circular chamber with a single side cell on the right (Shee Twohig 1981, 100). Both of these have decorated roofstones, orthostats and kerbstones. There are likely to be many more as yet undiscovered, as the southern mound has only been partially excavated.

**Fourknocks**

Approximately 15km SE of the Boyne Valley monuments is the passage grave of Fourknocks I, excavated in the 1950s and subsequently restored (Hartnett 1957). Orthostatically built, with a corbelled chamber and lintelled passages and cells, it comprises a NNE-SSW passage leading to a subcircular chamber with three cells leading off in a cruciform arrangement. There is a clear differentiation in the three cells, with the western and southern cells, which are to the right-hand and opposite the passage entrance respectively, prioritised in terms of grave goods, human remains and decoration. The lintels above the western and southern cells and at either end of the passage have elaborately pecked parallel zigzag and lozenge designs; other stones have spirals, chevrons and curvilinear motifs (Shee Twohig 1981, 106). A further tomb, Fourknocks II lies 50m to the east but is not accessible (Hartnett 1971).

**Loughcrew**

The complex at Loughcrew is some distance to the west of the Boyne Valley sites and comprises 27 passage graves on the three hills of Carnbane East, Carnbane West and Patrickstown. Fourteen of these contain decoration (Shee Twohig 1981, 205-220), in what Shee Twohig termed ‘Loughcrew style’ (op. cit., 106). This is characterised by ‘random’ groupings of concentric circles, dot-and-circle, serpentiniform and U-motifs, and some radials and parallel lines (ibid.).

The above sites have received considerable attention in the literature with a history of academic research stretching back into the 19th century. In contrast, decoration was only recognised at sites in the west of Ireland during the 1990s (Curran-Mulligan 1994). Recent survey has identified several ‘new’ examples in the passage tomb complex at Carrowkeel, County Sligo (Hensey and Robin 2011).

**Passage grave art in Britain**

Compared to Ireland, relatively few passage graves in Britain appear to have been decorated - or at least have surviving decoration. Those that are known are concentrated around the west of the country, around the Irish Sea. A cup-and-ring pecked stone was found in situ within the chamber at Cairnholy I, Galloway, with a further weathered example found on a detached slab near the chamber during excavation (Piggott and Powell 1949, 118, Plates XXV, XXVI and XXXI). Cup-and-ring marks were recorded on the walls of the chamber of the Mid Gleniron I cairn, in Galloway (MacWhite 1946, 70). Within the White Cairn of Bargrennan, also in southwest Scotland, several scratches, some of which formed rectilinear designs were recorded within the chamber (Piggott and Powell 1949, 148). This might be a rare example of incised decoration from mainland Scotland, but interpretation is cautious as the chamber and passage were exposed prior to 1896 (Henshall 1972, 445).

The only known extant passage graves with decoration in England and Wales are Barclodiad y Gawres and Bryn Celli Ddu, both on Anglesey. Other decorated stones in Anglesey, including the Llwydiarth Esob Stone, may have derived from passage graves (Lynch 1974, 118; Nash et al. 2010). Several sites in the Isle of Man appear to re-use decorated stones from other monuments, possibly destroyed passage graves, although only a handful bear motifs other than cup-marks (Darvill and O’Connor 2005, 234, Table 1). These include the Cronk yn How stone, which may have originally been part of a stone pair which was demolished during the millennium BC to create a barrow. This has a series of incised geometric motifs comparable to some of the incised motifs found in Orkney (op. cit., Figs.4-8). Decorated stones found at Calderstones, Liverpool, and Fylingdales, N. Yorkshire almost certainly derived from destroyed passage graves, indicating that the original distribution was far wider than that known today.

**Bryn Celli Ddu**

Bryn Celli Ddu, on the SE coast of Anglesey, was first excavated in 1865 and again, more systematically in the late 1920s (Hemp 1930). The long history of the
site is indicated by a line of post-holes in front of the entrance, which yielded Mesolithic dates (Burrow 2010, 255). Its Neolithic life began with a hengiform enclosure of a ditch and probable bank surrounding a central pit, cremations and an orthostatic circle of stones (Shee Twohig 1981, 230). These were subsumed into a passage grave contained within a 28m diameter mound; this comprised an 8m long passage leading to a polygonal lintelled chamber (ibid.). The tomb is aligned with the sunrise on the summer solstice, when sunlight penetrates the passageway to illuminate the inner burial chamber (Burl 2000, 189; Burrow 2010). The central pit, outside and immediately to the back of the tomb chamber, contained a human ear bone, and was partly covered with a capstone. This was overlapped by the famous ‘Pattern Stone’, extensively decorated with picked parallel meandering lines on both faces and what would have been its top edge (Shee Twohig 1981, Fig. 269). It is believed to have originally stood upright (op. cit., 230). A recent re-appraisal of the site concluded that the ditch and passage grave were contemporaneous, and that the tomb was built between 3074 and 2956 cal. BC (Burrow 2010). It seems likely that the pit and the placement of the Pattern Stone were part of a pre-construction phase, and that the decoration of the stone was part of a dedication ritual marking this process (Shee Twohig 1981, 230; Nash 2012, 137). A further monolith stood inside the tomb in front of one of the cells.

Barclodiad y Gawres

Barclodiad y Gawres, overlooking the Irish Sea on the southwest of Anglesey, provides the closest comparison for the Irish passage graves in terms of both architecture and decoration. Excavated in 1952-3 (Powell and Daniel 1956), it has been partly reconstructed to its current accessible form. Its cruciform chamber, passage orthostats and part of the circular mound are in situ, but no roof-stones survive. Pecked spirals, lozenges and chevrons, similar to those seen at the Calderstones and at Newgrange, survive on several stones (Shee Twohig 1981, 230; Nash and Stanford 2007). These are concentrated at the point where the inner passage meets the main chamber, and include C16, which has a pecked anti-clockwise spiral, parallel lines of zigzags and nested lozenges surrounded by parallel meandering lines similar to those on the Pattern Stone at Bryn Celli Ddu.

Opposite this stone on the eastern side is Stone L8, where a recent survey recorded ‘new’ pecked concentric circles and spirals, in addition to the previously reported pecked lozenges and chevrons (Nash and Stanford 2007). This stone’s weathered state may mean it was a re-used monolith that originally stood outside (ibid.). Spiral designs are also present on the backstones in the side cells either side of the chamber, although there is no decoration in the southernmost-cell (Shee Twohig 1981, 229). Less frequently discussed is the pick-dressing on Stone C14, which forms horizontal corrugations and has been compared to Stone R1 at Newgrange (op. cit., 230).

The Calderstones

The Calderstones, now in the suburbs of Liverpool, comprises six decorated stones, divorced from their original context but probably from a passage grave comparable to the Anglesey tombs. The stones were repeatedly disturbed in the 18th and 19th centuries, and moved to their current location in a greenhouse within Harthill Park in 1954, when the carvings were comprehensively recorded (Forde-Johnston 1958). The six surviving stones are decorated with spirals, concentric circles and lozenge designs (Shee Twohig 1981, 229), and further faint motifs have recently been recorded (Nash and Stanford 2010, Plates 3-13). Although the original placement is not known, it is thought that the carvings on several faces would have been ‘hidden’ (op. cit., 15). Various cup-marks, footprints, a Maltese cross, a dagger, Victorian bootprints and modern initials are also carved on to the stones. A monolith known as the Robin Hood’s Stone, now set in concrete at a roadside in Allerton, approximately 1km SSW of the Calderstones is also reputed to have come from the destroyed site. This has a series of grooves and cup-and-ring marks and was moved to its current position in 1928 to accommodate a housing development (Nash 2013b). The Robin Hood’s Stone also has ‘hidden art’: simple curvilinear motifs on the base of what was originally a south-facing panel (op. cit., 214).
Fylingdales

In 2003, a wildfire on Fylingdales Moor, NE Yorkshire, exposed an orthostatic circle of stones, one with a bordered cup-marked disc, and another with extensive pecked geometric decoration (Vyner 2011). This had cross-and-lozenge, zigzag and interlinked lozenge motifs, around a boxed, filled opposed-triangle design (Figure 9).

It probably started life as a free-standing monolith which was incorporated into a small circular arena formed by alternating decorated and undecorated stones. This was filled with rubble to create a small cairn comprised of a number of cup-marked and other stones including a small block detached from the chief decorated stone (op.cit., 11). This conforms to a wider pattern of decorated stones which were apparently deliberately produced and built into Early Bronze Age burial monuments (Deakin 2007, 112; Vyner 2007, 91; O’Connor 2010, 157) and provides a parallel for the deposition of several cup-marked stones at the Ness of Brodgar (Chapter 8). No dating material was obtained from the Fylingdales site, but it is believed to be an Early Bronze Age monument re-using Later Neolithic material (Vyner 2011). The nearest parallel for the geometric decoration is found in the Boyne Valley (Shee Twogig 1981, fig. 229).

Carvings in other contexts

Although commonly associated with Neolithic funerary sites, stone carvings do appear - albeit less frequently - in other contexts. Decorated stonework in a domestic setting is currently only known in Orkney (Chapter 3). Deliberately incised motifs have been recorded on the walls within the flint mines at Cissbury, Harrow Hill, Church Hill and Grimes Graves (Teather 2011). Parallel lines and cross-hatched designs predominate, although at Cissbury there are what might be deer representations (op. cit., Figs. 3-9). Linear incised motifs were also present on the ditch walls of the Neolithic barrow at North Marden, West Sussex, where five portable pieces of incised chalk were also recovered (Drewett et al. 1986, 37-38, Fig.6). Similar linear markings were also uncovered at Maumbury Rings, Dorset (Teather 2011, 243). At the Late Neolithic causewayed enclosure at Flagstones, Dorset, a group of *in situ* carvings were recorded on the side of the exposed chalk faces of the ditch sides in the outer circuit (Woodward 1988). They comprise carved curvilinear, cross-hatched and arcading parallel lines and provide further evidence for the links between monument construction and the practice of decorating stone. A link between the wider landscape, rock art and stoneworking activity may also be provided by the Copt Howe carvings, which appear to relate to the Langdale Pikes which overshadow the site (Sharpe 2007).

The association between standing stones and passage graves has long been recognised, with many authors suggesting that this is related to the commemorative potential of monoliths (Parker Pearson and Ramilisonina 1998; Richards 2004a). An excellent example can be seen at Maeshowe, which has four, non-structural, upright monoliths in each corner of its internal chamber. On each of these are incised geometric motifs which are likely to be Neolithic (Chapter 4). Although not in a funerary context, the standing stone in the forecourt of Structure 10 at the Ness of Brodgar is cup-marked. Significantly, one of its packing stones was also cup-marked (SF11504), mirroring the recent excavation of a cup-and-ring marked packing stone from the socket for a monolith at Llanfechell, Anglesey (Nash et al. 2005).

There are pecked spirals on the stone setting at Temple Wood, Kilmartin, Argyll (Scott 1989), and a number of sites in Cumbria also have decoration. For example, several stones at both Long Meg and her Daughters and Castlerigg have spiral and angular carvings, and at Glassonby, a ring cairn includes a stone decorated with a design of concentric circles and chevrons, facing towards the centre of the setting (Beckensall 1999). Many other stone circles and monoliths bear cup-marks, such as the Ballymeanoch group of stones in Kilmartin (Allen 1882, 114), which may post-date the construction of the monument. Nevertheless, at Bryn Celli Ddu, and possibly Fylingdales and Barclediad y Gawres, decorated standing stones appear to have formed an early focus for activity and were then incorporated into monuments. At Gavrinis and D’Er Grah in southern Brittany, a 10m long decorated menhir was built into the roof structure of the tombs, with a third section incorporated into the passage grave of Table des Marchands (Le Roux 1985). A similar pattern can be observed at Cairn F at Carrowkeel, and Cairn L at Loughcrew (Cooney 2000, 132). Central timber posts at Fourknocks I and Tomb 7 at Carrowmore may have served a similar role, but in wood rather than stone (ibid.). Various decorated monoliths, such as the spiral-pecked stone from Llanbedr (Lynch 1992), may also have originally formed part of passage graves.

These examples suggest that not only might sites have more complex histories than often discussed, but that the process of decorating and placing stones may be connected to particular activities at key stages in the life of the monument. This finds a parallel with the context of many of the decorated stones at the Ness of Brodgar (Chapter 6).

Motifs and style

When Henri Breuil turned his attention to megalithic art, he saw many of the motifs as anthropomorphic representations, particularly faces and eyes (Breuil 1934), a contrast to the ‘hunting magic’ represented by the animals in Palaeolithic art (Bradley 2009, 55). The idea was enthusiastically adopted by many other archaeologists at the time (Crawford 1956), but although several portable figurines are now known from Neolithic contexts (see below), obviously anthropomorphic
represents in rock art generally only appears from the later 3rd millennium (Cochrane et al. 2015). The Cochno Stone in Whitehill, Dumbartonshire, has four ‘footprints’ (two with four toes) in addition to spirals, cup-and-rings and other marks (Morris 1981, 124, Plate 112). The Calderstones has three stones with toed feet (Forde-Johnston 1958), and toed footprints were carved into a cist slab at Pool Farm, Somerset; this covered a burial dated to 1920-1735 cal. BC (Coles et al. 2000).

Other feet and handprints seem to be much later, such as the example from Dunadd, or the carving inside Kilnecairn Church in Ford, Argyll and Bute (Beckensall 1999). Also later are axe and dagger carvings. The majority of these are on the stones at Stonehenge, where 115 EBA unhafted metal axe-heads are carved; 71 of these were only identified during the recent laser-scanning programme (Abbott and Anderson-Whymark 2012). They depict flanged bronze axes which date to c.1750-1500 cal. BC, when Stonehenge was almost 1,000 years old and the central focus for the largest grouping of barrows in Britain (op. cit., 54). A similar date and funerary association is intimated by the flat axes carved at Ri Cruin and Nether Largie Mid and North (where they overlie cup-marks) in Kilmartin, Argyll (Morris 1977, 109, 117) and in a cist at Kilbride (Abbott and Anderson-Whymark 2012, 37). At Badbury Barrow, Dorset, two daggers, two axe-heads and five cup-marks are recorded (Piggott 1939) and two broad butt flat axe-heads are carved in bas relief on one of the monoliths in the Boscawen-un stone circle, St Buryan, Cornwall (Nash 2007b, 183). A dagger was recently identified on one of the Calderstones (Nash and Stanford 2010). Further daggers exist at Stonehenge (Abbott and Anderson-Whymark 2012, 37), but other previously reported carvings at the site, including a quadrilateral shape, torsos, cup-marks and snakes were shown to be stone dressing, natural irregularities or differential weathering (op. cit., 53). It is now generally accepted (although see Robin 2012) that the overriding characteristic of megalithic art in Britain and Ireland is the dominance of non-figurative designs (Figure 10).

Several authors have simplified these motifs into schematic forms to allow for ease of discussion and the creation of typologies. Although problematic in many ways (Chapter 8), these schemes highlight the differences between regional assemblages; for example, many of the forms in Figure 10 are absent from the Orkney repertoire. Each passage grave also appears to have its own individual ‘style’ (Shee Togih 1981, 119), but draws upon a common repertoire of techniques such as incising, pick-dressing, pecking and grinding, and motifs which can be angular and geometric, forming lozenges, chevrons and zigzags, or curvilinear, comprising spirals, rings, and single or groups of cup-marks. Shee Togih divided the Irish corpus into two ‘styles’: Fourknocks and Loughcrew, based upon their techniques of execution and motifs (1981, 106). In the Fourknocks style, motifs have ‘a coherent design [and]…give a pleasing overall effect (ibid.). In contrast, in the Loughcrew style, ‘[t]here does not appear to have been any real attempt to achieve an overall artistic effect’ (ibid.).

As noted by Muiris O’Sullivan (1986, 71), a focus on the subjective aesthetics of motifs does not allow for the discussion of non-formal treatment such as pick-dressing, and leads to ‘an observer-imposed selection of what may be accepted as Passage Tomb

<table>
<thead>
<tr>
<th>Circular and semicircular signs</th>
<th>Angular signs</th>
<th>Meandering signs</th>
</tr>
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<tbody>
<tr>
<td><img src="image1.png" alt="Circular" /></td>
<td><img src="image2.png" alt="Angular" /></td>
<td><img src="image3.png" alt="Meandering" /></td>
</tr>
</tbody>
</table>

**Figure 10. The principal motifs in British and Irish passage grave art.**
*Image © Antonia Thomas, after Robin 2008, 300, fig. 3.34.*
Although they also served as motifs in their own right, pecked designs were often smooth to create sinuous, curvilinear motifs, or ground. Cup-marks are the most ubiquitous form of rock art and are found across the world, in a range of periods and contexts (Bednarik 2010, 5), and as such were excluded from Shee Twogig’s corpus (1981, 237). In Neolithic Britain and Ireland they are found in a range of contexts, and although more frequent in open-air rock art, they are also found in architectural settings from the Early Neolithic to the Bronze Age. They are rarely found in Orkney outside of the Ness of Brodgar. They are often pecked and then subsequently ground, although smaller cups are often drilled, leaving characteristic striations around the edge of the cup.

**Pick-dressing and chiselling**

Pick-dressing - involving the repeated, percussive act of hitting the stone to create a uniformly pecked surface – is frequently excluded from discussions of megalithic art but is also a highly specialised process of stone decoration (O’Sullivan 1986; Eogan 1997, Phillips and Bradley 2000). It is a particular feature at the Boyne Valley tombs, where it is found on accessible parts of the stone and often overlies or obliterates earlier motifs (O’Sullivan 1986; Eogan 1997, 218). It is a rare form of stone treatment in Britain and outside of Orkney, is only seen at Barclodiad y Gawres and on the Stonehenge sarsens. Pick-dressing enhances texture and colour and demonstrates a great interest in the surface of the stone (Cochrane 2009, 164). In the Boyne Valley it tends to appear as the final stage in a succession of overlying treatments applied to decorated stones (Eogan 1997, 224). Here, and in Orkney, it is concentrated in key areas such as thresholds, and positioned to favour a person entering rather than exiting a space (Cochrane 2009, 165). It seems that it was meant to be appreciated, and should be considered alongside other forms of stoneworking and decoration. An elaborate variation on this theme is bas relief working, which can be seen on three stones from the Ness of Brodgar but is not otherwise recorded outside of Ireland.

Chiselling, a form of indirect percussion which uses a flint tool and either a hammerstone or wooden mallet, is distinct from peck-dressing and produces characteristic angular scars. It is an uncommon form of stoneworking in Neolithic Britain and Ireland and is so far only identified at the Ness of Brodgar and Maeshowe. At both sites it overlies pick-dressing and likewise demonstrates an intense interest in the texture of the stone.
At the other end of the scale, the texture and surface qualities of stone were regularly enhanced through polishing. Shee Twohig dismissed the idea that some of the orthostats in Newgrange’s passage had been polished, suggesting that the visible sheen seen on these was due to visitors rubbing against them (Shee Twohig 1981, 118). However, in situ polished and incised stones have been noted at several Orkney sites. In each case, the surrounding stones are not polished and suggests that the decision to decorate particular stones was considered prior to, or during construction. As a treatment, it may have been used to prepare the stone for subsequent incising, an effect similar to that conjectured for the application of pigment (Bradley et al. 2000, 54).

**Colour and paint**

Painted designs are recorded within megalithic monuments in western Iberia (Shee Twohig 1981, 32-34), Brittany (Ramirez et al. 2015), Malta, and Sardinia (Arosio et al. 2011). The lack of comparable evidence within British or Irish passage graves may be due to the climatic influence upon the survival of paintings (Devignes 1996). Red/brown lozenges were recorded in Cairn T at Loughcrew (Breuil and MacAlister 1921, 4), but are no longer visible. Similarly, a spiral motif which was recorded on Stone 11 at Castlerigg (Beckensall 1999), and which appears to have ‘disappeared’ since 1995, may have originally been painted and just weathered away (Díaz-Andreu et al. 2006). Infra-red photography inside Maeshowe identified one area which may have been painted (Bradley et al. 2000, 54). This corresponded to an area with an incised design, leading to the suggestion that scratched lines may have been guides for painting, or that lines may have been incised through a previously painted surface (ibid.). A relationship between incised and painted motifs is certainly suggested in other media. The two hengiform enclosures at Maxey, Peterborough, produced two decorated antler, and one decorated deer rib fragment in association with Grooved ware (Simpson 1967). The two antlers were decorated with incised cross and chevron designs, infilled with red-brown ochre; the deer rib was decorated with incised chevrons coloured with red ochre and charcoal, mixed with animal fat to produce a pigment (op. cit. 139).

At Skara Brae, Childe found ‘paint pots’ containing red and white pigment which was similarly mixed with animal fat (Childe 1931c, 134), and may have been used for the decoration of stonework, the body or artefacts. Haematite and ochre have been found in abundance at the Ness of Brodgar, and may have been used to decorate architectural stone. The use of pigment to decorate Grooved ware pottery has also been demonstrated at the Ness of Brodgar (Roy Towers, pers. comm.), and compares well to the recent discovery of painted Ronaldsway ware from Billown in the Isle of Man (Darvill and Andrews 2014).

The links between megalithic art and the designs found on contemporary Grooved ware pottery have long been recognised (Shee Twohig 1981, 125-128; Wainwright and Longworth 1971, 71). Grooved ware is typically decorated with linear motifs such as zigzags and wavy lines, with spirals also making an appearance. There appears to be a chronological consistency to the association, with earlier Grooved ware vessels bearing incised motifs, and later designs having applied, or ‘plastic’ decoration; this has been compared to the apparent sequence of incised motifs in tombs which are earlier than the ‘plastic’ decoration of bas relief and pick-dressing (O’Sullivan 1986; Bradley 2009, 100). Although beyond the remit of the current study, the large assemblage of decorated Grooved ware pottery from the Ness of Brodgar could provide an important area for future research.

**‘Portable’ art**

Outside of Orkney, a relatively small assemblage of decorated portable stone items is known from Neolithic contexts in Britain and Ireland. The majority of these are from pit fills, including the chalk plaques from Stonehenge Bottom (Vatcher 1969; Harding 1988), and recent finds from King’s Stanley in Gloucestershire (Evans 2006, 4) and Rothley Lodge Farm in Leicestershire (Cooper and Hunt 2005). Engraved chalk items were recently been found within the midden associated with the Later Neolithic houses at Durrington Walls (Parker Pearson et al. 2006); this is particularly interesting given the similarities between these houses and those at Skara Brae (Parker Pearson 2007).

Two sites on the Isle of Man have also produced incised portable pieces. At Ronaldsway, a schist plaque with chevrons and lozenges on both sides was found on a Later Neolithic house floor (Bruce et al. 1947, 150; Clarke et al. 1985, 244), and a slate plaque, decorated with zigzags and parallel lines, was recovered from Ballavarry. This was from one of a series of interconnecting pits also containing Ronaldsway jars, and dated to 2887-2584 cal. BC (GU-2696) (Garrad 1984, 162-165). The recent discovery of an incised slate disc from Woodcock Corner, Truro (Taylor 2013) is unique for Cornwall. Found within a pit associated with Grooved ware pottery, it bears a chequerboard pattern on one face with interlocking filled lozenges on the reverse (Figure 11); its closest comparison is found within the Skara Brae assemblage (A. Thomas forthcoming).

An oval ‘plaque’ with finely incised lines on one face was found within the floor of the Later Neolithic axe factory at Graig Lwyd, Penmaenmawr, North Wales (Warren 1922). A small slab from a cist within a Neolithic cairn at
Knocknashee, Sligo, is decorated with a series of finely incised parallel and intersecting lines (Shee Twohig 1981, 234, Fig. 280). Although interpreted as a fragment of a larger piece, in its size, appearance and context it compares well to portable examples from Skara Brae and the Ness of Brodgar. Several portable incised stones have been found in later contexts but are thought to have been reused and have been assigned a Later Neolithic date due to their stylistic affinities. These include examples from Hanging Cliff, Kilham (Varndell 1999), Lord of the Manor Site 1, Ramsgate (op. cit., 353), Butterfield Down, Wiltshire (Lawson 1993, Rawlings, Fitzpatrick 1996), and Glastonbury Lake Village (Bulleid and Gray 1917). A fragment of incised limestone found at Poulton, Cheshire was recovered from a Bronze Age context but may be redeposited (Pitts 2009).

Incised stones from Barraculla, County Dublin (Lucas 1971, fig.5) and a perforated, decorated slate plaque from County Antrim (Hawkes 1941) are stray finds but are Neolithic in style, as is a hand-sized slab of sandstone bearing two carved concentric circles, which was recently found within quarry spoil at Over, Cambridgeshire (Cambridge University 2010).

Other stone artefacts with decoration comparable to Grooved ware designs and passage grave art include carved stone balls (Marshall 1977; Edmonds 1992), and the carved stone ‘phalli’ from Newgrange and Knowth (M. O’Kelly 1982, 76; Sheridan 1985/6, 28). A small spiral-carved siltstone ‘drum’ was recently found at Alt Goch Hill in Clwyd but is now lost (Chris Martin, CPAT, pers. comm.). Engraved chalk items are known from many Neolithic contexts in the south of England (Varndell 2012), but none yet compare to the ‘drums’ from Folkton, Yorkshire, which are elaborately carved with a range of incised geometric motifs, including lozenges, zigzags and chevrons. They were found in a child’s grave and dated to the Later Neolithic, and have stylised representations of human faces, comprising two ‘eyes’ under double-arc or ‘eyebrow’ motifs (Longworth 1999; Jones et al. 2015).

A strikingly similar motif can be seen in the Holm of Papa Westray South tomb, and on the ‘Westray Wifie’ figurine from the Links of Noltland, which dates from c2900-2600 BC (Moore and Wilson 2011). This is a rare anthropomorphic representation from the British Neolithic, although the spirally-decorated flint macehead from Knowth exploits a double-spiral for ‘eyes’ and the perforation as a ‘mouth’ (Eogan 1986, 142, Fig.57). Other examples may have existed in organic materials, such as bone, wood or antler, as a spirally-decorated antler mace was found at Garboldisham, Norfolk, below a riverbed during 1960s construction work (Edwardson 1965). The Folkton drums may be skeumorphic, as the treatment of the surface in places suggests chip-carving in wood (Powell 1966, 112). A hermaphroditic ashwood figure was recovered from the Bell Track in the Somerset Levels (Coles and Hibbert 1969, pl.XII, figs.9a, 9b); the trackways surrounding it gave a calibrated timespan of 3040-2450 BC (Coles and Dobson 1989). Somewhat larger and carved out of pinewood was the ‘Dagenham Idol’, found in the Thames marshes in the 1920s. This anthropomorphic figure was later dated to 2351-2139 BC (Coles 1990, 326). Amongst the Skara Brae artefacts which went to the National Museum in Edinburgh in the early 20th century was ‘a small piece of whalebone, cut as if intended for an idol or “fetish”’ (Archibald 1925, 82). This was depicted on a watercolour by Petrie in the NMS. It was recorded as part of their collections in the 1920s (Archibald 1925, 82), but had until recently been assumed to be lost. Nicknamed the ‘Skara Brae Buddo’, it is now known to form part of Stromness Museum’s extensive collection and is currently on display there.
DISCUSSION

Earlier in this chapter, I discussed the ways in which anthropologists and archaeologists have approached prehistoric art. Approaches to Palaeolithic cave paintings and Neolithic passage grave art have been strikingly similar. Both have been discussed like ‘the art that hangs on museum walls - images meant to be contemplated, interpreted, and aesthetically appreciated by a distanced observer’ (Boivin 2008, 99). This is, of course, largely how we encounter them. Decorated stones and artefacts are frequently divorced from their original context, and presented in a gallery or museum setting. Where they remain in situ, it is usually in structures that have been conserved and presented for public viewing, giving the appearance of an architecture which is static and unchanged since prehistory. On the printed page, prehistoric art and architecture are likewise reduced to static, typologically ordered forms that can be conveniently compared across vast timescales and geographical regions (Jones 2001b, 217; Bailey and McFadyen 2010, 576). With interpretations of stoneworking and decoration restricted to the surface of stones, visual qualities are prioritised over other sensory engagements, and there is little scope for exploring the relationship between raw material and ‘design’. At a range of scales, therefore, from art to architecture, form is prioritised over process, and the subtlety and complexity of Neolithic stoneworking and decoration is overlooked. This provides one of the central themes in this book; some of the key issues related to this are introduced below.

‘Reading’ images

With only a few exceptions, almost all approaches to Neolithic art fall back on the idea that it represents ‘something, anything…’ (Brumm et al. 2006, 185, original emphasis). Textual analogies (e.g. Tilley 1991) dominate discussions of Neolithic art. Carvings become a ‘language’ (J. Thomas 2005, 171) containing ‘grammar’ (J. Thomas 1992), ‘vocabulary’ (Herity 1974, 103; Nash 2013a) and ‘metaphors’ (Mazel et al. 2007a) which can be deconstructed and translated. For some, the discursive capabilities of Neolithic carvings are so sophisticated that they are even capable of ‘rhetoric’ (Nash 2002, 176). These linguistic analogies are problematic. They say more about archaeological practice, than the subject of study; in ‘the hyperliterate world of academia it is no surprise that writing and reading…have particular appeal as paradigms for understanding social systems (Howes 2005, 1).

The idea that art is like a language rests upon several linked assumptions: that images (always) ‘mean’ something, that this meaning could be ‘deciphered’ in the Neolithic, and by extension, that modern archaeologists should be able to translate this meaning (Cochrane 2009, 173; Card and Thomas 2012, 121). If Neolithic carvings are ‘only accessible to … an elite … and only them able to ‘interpret’ the symbols to the rest of the group’ (Mazel et al. 2007b, 5), this carries a subtext that archaeologists are also an elite group tasked with translating art ‘symbols’ for the wider public (Cochrane 2009, 173; 2012, 180). It is certainly true that for many non-industrial societies, such as the Yolngu and Walbiri Aborigines or the Abelam of New Guinea described earlier, art may have language-like qualities. But even in these cases, meaning is context-specific, and formally identical signs and symbols can be translated in myriad ways. We cannot ask the Neolithic stone-carvers about their art like we can the Walbiri or Abelam (cf. Bradley 2009, 41), so should not assume that all examples of Neolithic art have a meaning, nor that this meaning is singular or universal. We should look beyond a simple search for meaning per se, to see how stoneworking and decoration was invested with meaning through praxis (Boivin 2008, 9).

A useful analogy is offered by Maurice Bloch’s oft-cited study of the highly decorative carvings on Malagasy wooden doorways. Bloch found that for the Zafinimary who created them, the design of the carvings does not strictly ‘mean’ anything (1995, 213). Instead the hardening and carving of wood was seen as an embodiment of the maturation of people, marriage and the marital home, so much so that the ‘house is the marriage’ (op. cit., 215). The designs did not ‘signify’ anything, nor was their aesthetic appearance a primary concern. Carving continues the process of hardening by ‘honouring the wood’ and so the finished appearance of the carvings was relatively insignificant. Rather it is meaningful as part of a worldview rooted in practice, through continued building and carving (Bloch 1995, 213-215; Boivin 2008, 86-87). Bloch’s study provides a useful way for thinking about how stone-carving and decoration may have been significant in the Neolithic (Cochrane 2009). Of particular interest is the way in which the process of repeatedly carving, and contributing to carvings, invested them with a significance beyond their appearance at any given moment. A crucial element of the carvings found in Irish tombs appears to be that they display several phases of inscription and superimposition (Eogan 1997). The identification of these sequences indicates that many of these stones have long and complex biographies.

Some decorated stones were taken from older structures and re-used; others may have been decorated specifically to mark and be incorporated into construction; other stones and decoration were added to, altered, renewed or defaced at various stages (Bradley 2009, 51). This has significant implications for how we interpret particular designs, when they may all be ‘unfinished business’ (cf. Gell 1998, 80), but this complexity is lost in the totalising narrative of many semantic approaches. In the Neolithic, any meaning associated with decoration would not have been static, but relational, and context-specific (Chapter 9).
Visibility and audience

One phenomenon in particular suggests that we should look beyond the visual aspects of the stones. In all of the passage-grave sites which have been investigated in detail, excavators have found decorated stones which would have been ‘hidden’ during the use of the monument. In Ireland, some 18% of the corpus might be described as having hidden decoration (Robin 2008, 163). In Orkney, ‘hidden’ stones have been found at Skara Brae and at Ness of Brodgar; in each case, it is only through excavation that these have been identified. With most interpretations of architectural decoration based on the assumption that it was meant to be seen and read, ‘hidden art’ is frequently dismissed with pragmatic explanations. It is written off as trial pieces (O’Kelly et al. 1978, 325) the work of amateurs trying their hand (Herity 1974, 186) or explained as due to a last-minute change in design (Powell and Daniel 1956, 47). More commonly, hidden stones are seen to result from simple re-use (Nash 2007a, 138). That said, the circumstances behind the placement of hidden stones can be complex, precluding purely functional explanations (Robin 2008, 185). This is suggested by the correspondence of particular designs on ‘hidden’ stones, and those which are ‘official’ or visible at Newgrange (O’Kelly 1978, 364). At the Ness of Brodgar, the discovery of several hidden stones also appears to indicate deliberate placement. These indicate that sustained visibility may not have been a primary, consistent, or the only, concern for all stones. Other characteristics, such as the process of carving, and the act of placement, may have also been significant.

Rather than seeing carved stones as ‘little more than blank canvases for the encoding of abstract ideas’ (Brumm et al. 2006, 185), it may be useful to explore the non-visual qualities of working stone (cf. Tilley 2004, 154). Recent anthropological studies have investigated the auditory, olfactory and haptic sensations associated with rock-art in South Africa (Ouzman 2001; Rifkin 2009) and Micronesia (Rainbird 2002), and suggest that carvings may be only one product of a more complex process of social engagement with stone (ibid.). Drawing upon ethnographic evidence in South India, Adam Brumm, Nicole Boivin and Richard Fullager go further, suggesting that the carvers of Neolithic engraved stones in the same region were responding to a ‘life-force’ within the stones themselves (Brumm et al. 2006). Rather than being a passive entity, their research has shown that stones themselves may be both animate, and animated through carving.

In Neolithic Britain and Ireland, people certainly went to great lengths to obtain different, and very particular types of stone for artefacts (Bradley and Edmonds 1993; Cooney 2002; Edmonds 2004), burial monuments (Mitchell 1992; Bukach 2003; Bradley and Phillips 2008) and stone circles (Collins 1976; Downes et al. 2013). Stone, and the type of stone used, was meaningful. This opens up the discussion to include the materiality of the stone itself, and to see it not just as a ‘neutral canvas for image creation, but a fundamental aspect of a process in which the final image may even play only a relatively minor role’ (Boivin 2008, 100). In Orkney, we also find particular techniques of stoneworking and decoration tend to be associated with certain types of stone. This suggests that we should examine not only the process of working the stone, but how different variables, such light, interact with its materiality. The architectural context of the decorated stones discussed here is central to that examination.

Architecture and context

I have suggested above that visual appearance was not a consistent concern for all decoration in Neolithic passage graves. Nevertheless, the way in which light - and therefore visibility - interacts with architecture has been recognised at a number of Neolithic monuments. Celestial alignments are well-recorded, most famously at Newgrange, whose entrance passage is aligned on the midwinter sunrise, when light travels through a ‘light-box’ above the entrance down the passage to hit the back wall. Other alignments have been noted at Knockroe, Knowth and Loughcrew in Ireland, Bryn Celli Ddu in Anglesey and Maeshowe in Orkney (Bradley 2007, 104). Significantly, these monuments are all decorated and at Newgrange and also at Loughcrew T, carvings at the rear of the chambers become illuminated at specific points in the year (Bradley 1989a, 255). However, a frequent observation at passage graves is that decorated stonework was positioned in locations which would have been least illuminated by sunlight entering the passage (ibid.). In the Irish tombs, the stones with the most complex designs are frequently situated in the deepest areas of the tombs (J. Thomas 1992). George Nash has suggested that passage grave art was deliberately placed to change the ambience of the space between different sections of the passage and chamber, in particular at the point where natural light fades (Nash 2007a, 137). At this point, stonework would have to be viewed with the aid of artificial lighting, which would have lent any decorated surfaces a flickering quality (ibid.), perhaps rendering them more immediately animate. The important point here is that light is not static, nor visibility constant, but experiential and mutable.

Regardless of how, or when, particular stones and carvings were viewed, however, their location and placement within tombs was undeniably significant. Liminal areas and divisions of space such as cell openings, kerbstones and portals are frequently decorated, and find a parallel in many ethnographic examples of complex, geometric designs defining both physical and conceptual thresholds (Gell 1998, 87-95). In these locations, carvings may...
have had an apotropaic significance, warding off evil and mediating the transition between the worlds of the living and the dead (Borić 2002). In support of this notion, particular motifs appear to be associated with these liminal locations, with the parallel chevrons at Fourknocks, Knowth 1 and Loughcrew (Eogan 1986, 146-195; Robin 2010, 387) a striking example. At other sites, a similar pattern is noted between architectural limits and ‘scalariform’ motifs, formed by groups of parallel lines (ibid.).

These observations highlight the significance of the association between art and architecture, and form a useful baseline from which to analyse the Orkney material. Nevertheless, the emphasis remains upon buildings at one particular point in their history, in their completed, ‘as built’ form, and the discussion remains focussed on the visual, surface qualities of stones. These interpretations do not explain the full range of different types of stoneworking, decoration and setting, such as the ‘hidden stones’ or the sequences of carvings described above. We must look beyond the ‘finished’ product of buildings to explore their ongoing biographies. With the exception of discussions of hidden stones, very few authors have engaged with the issue of when particular stones were decorated, and how and why they were revisited. Of course, the nature of the evidence, and the way in which we encounter it, does not normally allow us to ask these questions. In Orkney, however, it is possible to go further. The range and quality of in situ decorated stonework, in both domestic and funerary contexts, and the affordances of excavation, allow an understanding of the biographies of buildings which is usually out of reach.

**SUMMARY**

In this chapter I have introduced the background to understanding Neolithic art in Britain and Ireland. The material described includes a bewildering variety of different motifs and techniques of execution. The context and placement of carvings is equally diverse. Whilst the majority of architectural carvings are found in passage graves, in Orkney they also appear in settlements. The incorporation of older decorated stones in tombs and the presence of carvings on other monuments frequently suggests complicated biographies and sequences of attention/appreciation. Although many decorated stones were probably meant to be seen, the presence of hidden carvings suggests more complex sets of conditions and it is clear that we are not dealing with a unitary phenomenon.

The all-encompassing designation of art is not helpful to describe this diversity. It also suggests that prehistoric art was something to be viewed at leisure by occupants as if in a modern-day gallery. This is a remarkably persistent idea, and mirrors the way in which the earliest forms of art – Palaeolithic cave paintings – have also been treated in archaeology. With the discussion limited to the surface, visible and visual aspects of stones are prioritised to the exclusion of the processes by which they came to be selected, carved, placed and appreciated. This does not allow room for discussion of the relationship between the materiality, surface design and techniques of execution. The subtleties of the long sequences of attention, the temporalities of engagement with stone and the wider social context of stoneworking are overlooked in a search for a singular ‘meaning’. As such, the manner in which art has been treated is in fact strikingly similar to the way in which architecture has also been discussed in archaeology. As will be discussed in the following chapters, studies frequently focus upon one point in the life of buildings, and prioritise what is seen as the ‘final’ form above other stages. Such approaches are clearly problematic for studies of architecturally-situated art and do not address the wider context of stoneworking and decoration in the Neolithic. Contrary to recent claims that British rock art studies have ‘come of age’ (Mazel et al. 2007b), interpretations remain tied to a series of problematic assumptions and totalising narratives.

In the Neolithic, the diversity of techniques, materials, contexts and designs seen in architectural settings was not accidental, and the relationships between these aspects require serious and subtle analysis. This demands an approach which unpicks the complex biographies of stones and buildings – of art and architecture – in parallel, and looks beyond simplistic visual assumptions. This type of analysis is of course, rarely achievable, but is made possible by the excavations at the Ness of Brodgar, where Britain’s largest assemblage of Neolithic decorated stone has been found. We may not be able to ask Neolithic stonecarvers about their intentions, but archaeology has a potential to understand architecture in a different way than that pursued by anthropologists and art historians. Particularly through excavation, we can explore how buildings and carvings emerge through process, and how the temporality of the working, decoration and appreciation of particular stones relates to the wider context of life in the Neolithic. This is perhaps where archaeology can offer the most to studies of prehistoric art and architecture (cf. Bradley 2009, 44) and these themes – process, temporality and context – form the backbone of the research presented here.

In Chapters 4, 5 and 6, these issues will be introduced in relation to Maeshowe, Skara Brae and the Ness of Brodgar; in the next chapter I will set the scene for these discussions by introducing Neolithic Orkney.
3. ORKNEY

Figure 12. Victorian Graffiti at the Ring of Brodgar. Image © Antonia Thomas
INTRODUCTION: ORKNEY

The story of Orkney’s Neolithic art and architecture starts in the Devonian period, 418-362 million years ago, when the area was occupied by a deep freshwater lake (Barclay 2005, 3). Now known as Lake Orcadie, this sat within an equatorial and mid-continental desert and abounded with animal and plant life (Hall and Brown 2005). Over hundreds of millions of years, the sedimentation of the lake’s silts and muds created a distinctive sequence of flagstones, mudstones and sandstones collectively known as the Old Red Sandstone. The sedimentation and erosion of these lacustrine deposits gave rise to Orkney’s characteristic landscape of gentle hills, which yield at the coasts to shore platforms and sea-cliffs, punctuated by deep clefts or geos where the laminar flagstone fractures along its bedding plains (ibid.). When the first farmers began to build their permanent homes in the 4th millennium BC, these laminar qualities lent themselves to the quarrying of building stone, whilst the eroding lacustrine sediments created rich silty soils and easily tilled, fertile ground. In the Neolithic, stone would have been easily prised from rock-faces at the coast or an outcrop using little more than wooden wedges, water and human effort, a method of quarrying that changed little until recently. As a result, Orkney boasts an archaeological record of stone-built tombs, houses and standing stones from the last six millennia which is almost unparalleled in northwest Europe.

In the Neolithic, the richness of Orkney’s resources was matched by its prime location, an axial point in a megalithic world stretching from Ireland to northern France and Iberia. Four thousand years later, it was the islands’ strategic position in this same northwest European ‘sea-road’ which led to the successful establishment of the Norse earldom in Orkney by the earls of More in Western Norway (Grieve with Gibson 2005, 66). Viking activity in the islands was extensive, and included frequent interventions in, and appropriation of, Neolithic sites (Leonard 2011). This is famously evidenced at Maeshowe, where the finest collection of runes outside of Scandinavia can be found carved into the tomb’s walls. More recently, Orkney’s geographical location placed it centrally on a route to the High North, and the islands were often the last watering hole on a route which took antiquarians, polar explorers and deep sea trawlers to Iceland, Greenland, and Arctic Canada. The southernmost point on a northern routeway, Orkney’s position meant that the islands saw a host of visitors in the 18th and 19th centuries. The accounts of Arctic-bound travellers, such as Joseph Banks in 1772 (Lysaght 1974), provide some of the earliest surveys of Orkney’s Neolithic monuments. Tours to Orkney became de rigueur in the 18th and 19th centuries, coinciding with agricultural improvement and together leading to a ‘Golden Age’ of antiquarian investigations in the islands. Large numbers of ‘tumuli’ – barrows and cairns – were opened up as a result, and many of these were subsequently investigated and presented to the public by the Ministry of Works in the 1930s, leaving the county with an exceptionally prominent archaeological record (Richards 2005b, 7). This combination of geological good fortune, geographical position, and long history of antiquarian study have written the story of Orkney, and continue to steer discussions of the Orcadian Neolithic.

These issues will be explored in relation to Maeshowe, Skara Brae and the Ness of Brodgar in Chapters 4, 5, and 6. In this chapter, I present the broader history of research on Neolithic Orkney and its art and architecture.

BACKGROUND TO RESEARCH

Until the 1800s, few investigations of sites were recorded, and descriptions tended towards fanciful accounts (Card 2005b, 41). Since then, Neolithic research and excavation has seen three main floruits of activity: the mid-late 19th century, the early 20th century and the current era of archaeological work which started in the 1970s (ibid.).

The ‘Golden Age’ of antiquarian investigations

In the 1830s, the collapse of Orkney’s once-thriving kelp-trade resulted in sweeping agricultural improvements (Thomson 2008, 266). Vast new areas of moorland were brought into cultivation, catalysing a ‘Golden Age’ of antiquarian investigations in the islands. Mounds were discovered, opened up or removed - mostly unrecorded - at an unprecedented rate (Card 2005b, 41). At the same time, an increasing demand for topographic and hydrographic surveys resulted in some of the first truly accurate maps of Orkney. Many of these contain invaluable information about the archaeological landscape, including the topographical map of the Stenness-Brodgar area, produced in 1852 by Admiralty hydrographer Captain F.W.L. Thomas (Card 2005b, 41). Thomas surveyed Orkney in 1849-50 from HMS Woodlark, and ‘excavated’ the Holm of Papa Westray South chambered tomb (Thomas 1852, 127-130, see below).

With growing interest in prehistory during the mid-late 19th century, more systematic excavations took place, although standards remained variable. Much work was undertaken by local landowners - Hebden in Eday, Traill in Papa Westray, Burroughs in Rousay, and Watt at Skaiil - but many sites were investigated by James Farrer, MP for Durham and friend of the Earl of Zetland (who owned large tracts of land in Orkney). Farrer was a frequent visitor to the islands and responsible for the investigation of many prehistoric sites, most notably Maeshowe in 1861. Even within the context of the time, Farrer’s work was notable for its destructive techniques and almost non-existent records. Fortunately, he was frequently accompanied by George Petrie, local sheriff, clerk and factor of the Graemeshall Estate,
whose detailed annotated sketches have left a significant legacy to Orcadian archaeology. Petrie reported Farrer’s investigations at Pickaquoy, noted carvings at the Holm of Papa Westray additional to those recorded by Thomas (Petrie 1857), and published Watt’s investigations at Skara Brae (Petrie 1867). Many sites excavated by Farrer and Petrie were also depicted by Henry Dryden, the famed architectural illustrator, although these were frequently based upon Petrie’s sketches rather than primary observations (Card 2005b, 42). After Petrie’s death in 1875, little archaeological work happened for the rest of the century, although the Ring of Brodgar, the Stones of Stenness and Maeshowe were included in the 1882 Schedule of the Ancient Monuments Protection Act. In 1885, these sites were visited by General Pitt Rivers, Inspector of Ancient Monuments (Card 2005c, 141), as interest in archaeological sites moved towards issues of protection, management and presentation.

A second ‘Golden Age’: the early 20th century

The Ring of Brodgar and the Stones of Stenness were taken into state care in 1906; shortly after two of the stones in the latter were re-erected and the ‘dolmen’ recreated (Card 2005c, 140). Maeshowe was taken into care in 1910. With the exception of limited investigations at Skara Brae (Balfour Stewart 1914), little fieldwork took place in Orkney until after the first world war. The two decades that followed saw a rapid escalation in archaeological activity. In 1922, the Orkney Antiquarian Society was founded. Skara Brae was taken into state care in 1924, and within a few years, V. Gordon Childe had arrived to oversee excavations on the site (Chapter 5). Childe’s ‘campaigns’ coincided with the visits of the Royal Commission on Ancient and Historical Monuments between 1928 and 1937, leading to a new chapter in Orcadian archaeology (Card 2005b, 42). He published detailed reports on his excavations, which were amongst the first to make extensive use of photography (Figure 13). Initially thought to be Pictish, Skara Brae’s date had to be pushed back by two millennia when Grooved ware was discovered in Neolithic contexts in Stuart Piggott’s excavations at Clacton (Warren et al. 1936). For Childe, this meant that the Orcadian Neolithic had to be defined by two contemporary cultures, a Megalithic Culture associated with tombs and Unstan ware, and a Skara Brae culture who used Grooved ware pottery (Jones and Richards 2000, 101). The idea that Orkney’s Neolithic can be characterised by discrete ‘cultures’ continues to resonate today (Richards 1995). The excavations at Skara Brae inspired many other excavations in the 1930s, such as those by Walter Grant, the owner of the Trumland Estate on Rousay, who investigated 11 sites between 1930 and 1937 alone (Reynolds and Ritchie 1985, 71).
In 1938, Childe and Grant collaborated on the excavation of Rinyo, where they found Grooved ware pottery and Skara Brae-type houses, but a complete lack of ‘Megalithic’ artefacts, confirming for Childe the existence of discrete cultural identities (Richards 1995, 123). These excavations were promptly published (Childe and Grant 1939), but further work was stalled by the Second World War. Childe’s work at Skara Brae also prompted the landowner of Papa Westray, William Trail, to excavate the Knap of Howar with William Kirkness (Trail and Kirkness 1937). Uniquely for the time, their report to the Society of Antiquaries of Scotland was illustrated by a 16mm silent film, shot after the excavation, but before the site suffered storm damage. Like Skara Brae, it was initially thought to be Iron Age; it was only with Anna Ritchie’s 1970s re-excavation of the houses that their 4th millennium date was realised (Ritchie 1983). Although the RCAHMS Inventory volume for Orkney was completed in 1939, the onset of the war meant that publication was not possible until 1946. When Childe and Grant returned to Rinyo in the same year, they discovered both Unstan ware and Grooved ware pottery (Childe and Grant 1947, 34-39), upsetting Childe’s notion of separate cultural entities. Walter Grant died in 1947, and archaeological investigations in Orkney waned after the floruit of the previous two decades. The exceptions to this were Childe’s excavations at Quoyness (1952) and Maeshowe (1956). The discovery of Grooved ware at Quoyness (Childe 1952, 137), confirmed the ‘rather disturbing results obtained at Rinyo’: that Childe’s concept of discrete archaeological cultures was no longer tenable (Richards 1995, 125).

Renfrew and the ‘New Archaeology’

By the 1970s, the diffusionist ideas and normative concept of culture espoused by Childe and Piggott were coming increasingly under attack from those championing the ‘New Archaeology’. Radiocarbon dating was demolishing the grand narratives which had dominated interpretations of the British Neolithic, although arguably it only replaced them with new ones (Richards 1995, 127). In 1972, Colin Renfrew initiated an intensive phase of investigation on Orcadian Neolithic sites, kick-starting the present era of archaeological work in Orkney (Card 2005b, 44). He was keen to apply the new scientific technique of radiocarbon (c14) dating to establish an absolute chronology for Orkney passage graves and undertook significant excavations at Quanterness, the Ring of Brodgar and Maeshowe, which were reported in Investigations in Orkney (Renfrew 1979). This presented a model for Orkney’s Neolithic monuments which was adopted almost exactly from one he had previously posited for Neolithic Wessex (Renfrew 1973), and which was founded on two key assumptions: the equation of social types and scale of monumental construction, and an evolutionary sequence which showed increasing monumentality – interpreted as an index of increasing social complexity (Richards 1998; Downes and Richards 2000, 160). In the same volume, Davidson tested the hypothesis originally put forward by Childe, that the Rousay cairns were built next to land suitable for early agriculture (Childe 1942). Davidson found there was indeed a close relationship between areas that were under modern cultivation and the land visible from the Rousay cairns, apparently agreeing with Renfrew’s model of territories in relation to the chambered cairns and potential settlement areas (Davidson 1979). By linking tombs with the territories of discrete social groups, Renfrew effectively reinforced the homogenous, normative view of culture which had characterised Childe’s thinking (Jones and Richards 2000, 103).

In 1972-3, over 40 years after Childe’s final excavations, Skara Brae was again the focus of fieldwork. Like Renfrew, David Clarke aimed to recover material for radiocarbon dating to secure the chronology for the site and resolve some of the earlier discrepancies (Clarke 1976a), whilst also providing material for the new galleries at the National Museum of Scotland. These excavations remain unpublished. There have since been several other important excavations of Neolithic settlements, including the work in the 1980s by Bradford University at Pool and Tofts Ness on Sanday (Dockrill et al. 2007; Hunter 2007). These sites demonstrate a remarkable longevity of settlement. Significantly at Pool, the sequence showed Unstan ware pottery overlain by Grooved ware (MacSween 2007, 325)

Dwelling amongst the monuments: Colin Richards and Barnhouse

Whilst Pool and Tofts Ness were still under excavation, Colin Richards initiated the first systematic fieldwalking programme in Orkney since the innovative work of Robert Rendall in the 1930s and was rewarded with the discovery of Barnhouse, an extensive settlement 150m north of, and contemporary with, the Stones of Stenness: within what had always been thought to be a strictly ‘ritual’ landscape (Richards 2005). Six excavation seasons revealed up to 15 houses which underwent several phases of remodelling and rebuild.

Despite this remodelling, the basic plan of the settlement - buildings arranged concentrically around a central open area – stayed the same (Figure 14). Two dwellings in particular were different in terms of their size, longevity and architectural layout. House 2, in the southwest of the settlement, was surrounded by five or six smaller buildings and appears to have remained in use throughout the life of the settlement (Richards 2005c). In this respect, and in its size (c. 12.8 x 10m) and cruciform layout, it is directly comparable to Structures 1 and 14 at the Ness of Brodgar (Chapter 6). Structure 8 is similar in size,
construction and internal layout to Structure 10 at the Ness of Brodgar. With an internal space of c. 7 x 8m, enclosed by a wall almost 26m in diameter, Barnhouse’s ‘big house’ has an internal layout not dissimilar to that seen in dwellings like House 7 at Skara Brae, such as a central hearth and dresser opposite the door (Hill and Richards 2005). But at Barnhouse, these are on a monumental scale and form the closest parallel for the complex at the Ness of Brodgar in terms of their layout, freestanding construction, and style of masonry. The main period of activity at Barnhouse appears to have been between 3150-2800 cal. BC (Colin Richards, pers. comm.), so the houses were lived in both before and during the use of the Stones of Stenness, perhaps housing the builders of the stone circle.

Recent work on Neolithic Orkney

Barnhouse’s connections to both the Stones of Stenness and Maeshowe, and evidenced several years later, similarities to the Ness of Brodgar, confirm the importance of the Stenness-Brodgar area in prehistory. This was reflected in 1999, when the Heart of Neolithic Orkney was inscribed as a UNESCO cultural World Heritage Site (WHS) comprising Maeshowe, the Stones of Stenness, the Watch Stone, the Barnhouse Stone, the Ring of Brodgar, and Skara Brae. Research over the last 30 years has been firmly focussed upon settlement sites, with not only Barnhouse, but also the Later Neolithic settlements at Crossiecrown (Card et al. 2016), the Links of Noltland (Moore and Wilson 2011) and of course, the Ness of Brodgar.

There has also been huge increase in known Early Neolithic domestic sites. Until the 1980s, only the Knap of Howar in Papa Westray (Traill and Kirkness 1937; Ritchie 1983) was known from the period. Early Neolithic houses have since been recorded at Howe, Stromness (Ballin Smith 1994), Pool, Sanday (Hunter 2007), Green, Eday (Miles 2008; 2010), the Knowes of Trotty, Harray (Card et al. 2006; Downes et al. 2016); Stonehall in Firth (Richards et al. 2016a; 2016b), and Wideford (Richards and Jones 2016) and Smerquoy, both St Ola (Gee et al. 2016), and the Braes of Ha’Breck, Wyre (Lee and Thomas 2012). These sites all have sub-rectangular, stone-built dwellings, typically subdivided with central orthostats. However, the discovery of timber structures at both Wideford and Braes of Ha’Breck suggests that architectural materials and techniques were far wider ranging than previously thought, the implication being that we have, until now, been dealing with only part of the picture (see below).

Although funerary sites have seen less intensive fieldwork in recent decades, there have been several important studies. The re-appraisal of the human skeletal material from Isbister (Lawrence 2006; 2012) and Quanterness (Schulting et al. 2010; Crozier 2014) has shown that these assemblages are exceptional, both in terms of their size and the demographic represented in the remains. Many of those interred appear to have suffered violent deaths, or had unusual pathological conditions. Recent excavations by ORCA at Outer Green Hill and Roeberry, both South Walls, previously thought to be a broch and a barrow respectively, have discovered Neolithic tombs (Lee 2009; 2012), allowing the possibility that many other sites could also be recategorised. The recent discoveries of semi-subterranean tombs at Crantit, St Ola (Ballin Smith 2014), and Banks, South Ronaldsay (Lee 2011), both containing undisturbed human skeletal remains suggests that similar sites may yet be found.

DEFINING NEOLITHIC ORKNEY

In Chapter 2, I discussed how passage graves emerged in Iberia in the 5th millennium, subsequently appearing in Brittany, then Ireland, Anglesey and Orkney in the mid-late 4th millennium. They were one of several architectural and artefactual forms which, coupled with the domestication of plants and animals, have come to define the Neolithic ‘package’. The implications of this pattern of movement have given rise to considerable debate over how, and when, Britain and Ireland became Neolithic (e.g. Sheridan 2003; 2004; J. Thomas 2008a; Garrow and Sturt 2011). There is not the space to iterate these arguments in full here, but they have tended to polarise around whether the Neolithic way of life emerged as a result of colonisation or indigenous adoption of ideas. Recent research is increasingly suggesting that the real picture was instead more nuanced and involved a range of maritime connections, allowing for the exchange and

Figure 14. Simplified plan of the main buildings, Barnhouse. Image © Antonia Thomas, after Jones and Richards 2005, 29, Fig. 3.8.
Figure 15. Orkney, showing the location of the main sites discussed in the text. Image © Antonia Thomas.
developments of ideas and practices throughout the Neolithic (Garrow and Sturt 2011). Similar questions surround the extent to which contact was instigated and maintained between the different areas of Britain and Ireland over the course of 4th and 3rd millennia BC (Sheridan 2004). The similarities between the form and decoration seen in both Irish and Orcadian passage graves situates Orkney at the heart of these debates and I will return to these later on in this chapter.

Until relatively recently, evidence for Mesolithic activity in the islands was virtually non-existent, and it was thought that ‘Orkney presented a virtually empty landscape to Neolithic man’ (Ritchie 1985, 37). Several recent important excavations of Mesolithic sites, such as Longhowe, Tankerness (Wickham-Jones and Downes 2007), and Links House, Stronsay (Lee and Woodward 2009), have collapsed this assumption and returned dates in the 7th millennium BC. Nevertheless, there is a gap of nearly 3000 years until the first stone buildings appear in the record and the earliest Neolithic remains elusiv, although the apparent hiatus in settlement may belie a largely ‘invisible’ phase of occupation which spans the Mesolithic-Neolithic transition. Increasing evidence for timber structures in the early-mid 4th millennium indicates the possibility that the monumental nature of stone-built architecture in the Orcadian Neolithic has diverted attention from other, less durable forms of building (see below). As we will see throughout this thesis, the root of the problem is the reliance upon strict typological classifications, which have then been used as a basis for chronological schemes.

**Chronologies**

The *Scottish Archaeological Research Framework* (ScARF) divides the Scottish Neolithic into three periods: from the transition from the Mesolithic to around 3500BC (Early Neolithic); c. 3500-3000BC (Middle Neolithic); and c. 3000-2500BC (Late Neolithic) (Brophy and Sheridan 2012, 17). Orkney’s Neolithic, however, traditionally continues throughout the 3rd millennium with a ‘transition’ between the distinct periods of the Early and Later Neolithic occurring around 3000BC (Card 2005b, 47).

This distinction rests largely upon crude typological differences, with the Knap of Howar and Skara Brae forming the ‘type sites’ for Early and Later Neolithic settlement respectively (e.g. Ritchie 1995), despite their exceptional nature. Within the simple typological scheme, Early Neolithic architecture is characterised by long, linear, rectangular dwellings and stalled (Orkney-Cromarty) cairns. The similarities between the two led Anna Ritchie to suggest that the tombs were ‘houses for the dead, emulating the houses of the living’ (1985, 52), an idea which persists to this day. Domestic buildings tend to be detached or semi-detached, and associated with round-bottomed pottery, largely undecorated but also carinated and incised ‘Unstan ware’.

The Later Neolithic appears at first to be dramatically different, and is typified by clustered houses in ‘villages’ and passage graves, which are associated with flat-bottomed, Grooved ware pottery (Card 2005b, 47). These appear to share a concentric ordering of space with contemporary henges and stone circles (Richards 1990). Despite these typologies, there is increasing evidence for a diverse range of architectural forms throughout the Orcadian Neolithic. For example, at Wideford, circular timber buildings appeared on the site as early as 3600 cal. BC, but were subsequently overlain with stone ‘long-houses’ (Richards and Jones 2016). At the Braes of Ha’Breek, Wyre, rectangular timber buildings were in use as late as 3300-3100 cal. BC, whilst charcoal from one of the lower fills in the stone quarry returned a mid-4th millennium date (Lee and Thomas 2012). The presence of timber structures may account for apparent scarcity of settlement in the earlier 4th millennium, although it is also possible that many of the earliest stone buildings were simply dismantled, or destroyed. At the Bronze Age barrow cemetery at Varme Dale, Rendall (Downes 1998), two samples of willow charcoal from layers underlying Mounds 1 and 2 returned dates of c. 3700 cal. BC (Ashmore 2003, 163). The large blocky stones built into the barrow kerbs were reminiscent of Neolithic masonry and may have derived from an earlier stone building (Jane Downes pers. comm.). Other early 4th millennium stone-built structures may have also once existed, but were subsequently dismantled, rendering them archaeologically undetectable.

Recent dating programmes, or the remodelling of existing dates for sites, are further disrupting old typologies. At Quanterness, a Maeshowe-type tomb with a Grooved ware assemblage, the original dating programme concluded that the main phase of use fell after 3000BC (Renfrew et al. 1976). New radiocarbon AMS determinations, combined with Bayesian modelling, now support a start date for deposition in the range 3510-3220 cal. BC (Schulting et al. 2010). This compares with the primary use of the recently-excavated stalled cairn at Roeberry, South Walls, which returned a date of 3517-3396 cal. BC (SUERC-47885; Dan Lee, pers. comm.). This concurs with dates from the Point of Cott in Westray (Barber 1997), which had two burials of between 3620 and 3350 cal. BC (op. cit., 59), broadly contemporary with the three primary burials at the stalled cairn of Holm of Papa Westray.

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1 The Times of Their Lives Project, led by Alistair Whittle and Alex Bayliss aims to obtain a more precise chronology for Neolithic Europe though the acquisition of hundreds of radiocarbon dates and the application of Bayesian modelling. The Ness of Brodgar and Skara Brae are included in the project, and the results are expected to be published in 2016 (totl.eu).
North at around 3500 cal. BC, and associated with Unstan ware pottery (Ritchie 2009). Similar dates were obtained from the re-dating of samples from the dwellings at the Knap of Howar (Sheridan and Higham 2006, 202-203).

Chronologically, therefore, there is a significant blurring between ‘Early Neolithic’ stalled cairns, and Unstan ware pottery, and ‘Later Neolithic’ chambered tombs and Grooved ware assemblages, confirming earlier suggestions of an overlap in the two ‘types’ (Renfrew 1979, 208-212). In settlements too, the scheme is not as simple as it once appeared. No Unstan ware was found at Barnhouse or Skara Brae; at Pool (and Rinyo), it was found overlain by Grooved ware (MacSween 2007, 325), but the early phases at Pool, Barnhouse and Skara Brae were contemporary with one another. All three may have been built as early as 3400 cal. BC, although likely nearer 3100 cal. BC (Ashmore 2005). The earlier phases of occupation at Later Neolithic settlements such as Barnhouse and Skara Brae are thus broadly contemporary with activity at many **typologically** Early Neolithic sites such as the Braes of Ha’Breck (Lee and Thomas 2012), but there are clear differences in material culture and architecture. Whilst many sites might loosely conform to typological distinctions between the Early and Later Neolithic, recent research is showing a period of 2-300 years at the end of the 4th millennium which is poorly-defined.

**Typologies**

These debates have significant implications for the stoneworking and decoration discussed in this thesis. Within funerary contexts in Orkney, individually decorated and dressed stone is exclusively associated with passage graves, and particularly Later Neolithic ‘Maeshowe-type’ tombs. Apart from at Green and Smerquoy (see below), all of Orkney’s known examples of Neolithic art are associated with Later Neolithic contexts. The use of diagonally-laid or herringbone patterned stonework at several tombs may point to a consciously decorative architectural scheme in the mid 4th millennium (Davidson and Henshall 1989, 30; Jones 2005a, 241; see Chapter 9), but no examples of carved or pecked decoration have yet been found in a stalled
Figure 17. Knap of Howar, Papa Westray, showing the ‘typical’ Early Neolithic linear architectural layout. Image © Antonia Thomas.

Figure 18. House 7, Links of Noltland, Westray, showing a ‘typical’ Later Neolithic concentric spatial layout. Image © Antonia Thomas.
‘Megalithic art’ in Orkney is almost exclusively associated with Grooved ware, passage graves and Later Neolithic settlements. Whilst this does not have to indicate that ‘…two communities with distinct material cultures…were involved in the building and use of the cairns…’ (Davidson and Henshall 1989, 64), it does mean that Childe’s issue of discrete cultural entities remains unresolved, along with the problem of how we get from what appears to be one distinct set of material and architectural traditions, to another (Richards 1995, 127).

Fundamental to the discussion is the extent to which the design and decoration of Orcadian funerary architecture, and in particular the passage graves which emerge in the late 4th millennium, was influenced by Irish tombs and reflects interaction between the two areas. The similarity between Orcadian passage graves, and in particular Maeshowe-type tombs, and those in the Boyne Valley has long been recognised and they share a number of features including layout, celestial alignments, concentric construction - and decoration (Eogan 1992; see Chapter 2). In a parallel vein to earlier discussions about the Mesolithic–Neolithic transition, these similarities have been variously interpreted as either the result of Irish colonists (Piggott 1954, 236), or due to an emerging Orcadian elite travelling to Ireland and bringing back design ideas (Brophy and Sheridan 2012, 29). There are certainly clear commonalities between Orcadian and Irish passage grave architecture and decoration in the late 4th millennium, but this observation is problematic. As we will see below, the preoccupation with Irish stylistic traits has encouraged a singular narrative for Neolithic art and architecture in Orkney and influenced discussions of stoneworking and decoration.

**ART AND ARCHITECTURE IN NEOLITHIC ORKNEY**

Orkney has no known examples of landscape-situated rock art, nor are there any decorated monoliths (although the Stones of Stenness bears some pick-dressing, as does the Dwarfie Stone, Hoy). This scarcity may be explainable by a geology that is particularly susceptible to weathering, and the fact that exposed outliers – relatively rare features to begin with – are frequently quarried over long timescales. Nevertheless, this contrasts with the wealth of architecturally-situated carvings and despite a relative lack of attention in the literature, there are 16 sites across Orkney where decorated stonework has been found in a secure Neolithic context, or in direct association with Neolithic buildings, with a further 20 examples are stray finds or re-used in later contexts (Figure 15).

**Figure 19. Approximate timeline of the main sites discussed in this thesis. Image © Antonia Thomas.**
Passage grave art in Orkney

The history of research on decorated Neolithic stonework in Orkney is remarkably limited. Apart from stray finds, stones from disturbed contexts or those re-used in later settings, until the 1980s, only three Orkney sites were considered to have true ‘megalithic art’: the Holm of Papa Westray South and Eday Manse tombs, and Pickaquoy near Kirkwall (Figure 20).

The Holm of Papa Westray South

In 1849, F.W.L. Thomas, Captain of the Woodlark, who was surveying in Orkney for the Royal Navy (see above), was invited by Thomas Traill to investigate a ‘Pict’s House’ on the Holm of Papay (Thomas 1852, 127-130). This turned out to be a massive passage grave, the southernmost of two tombs on the island, measuring nearly 38 x 20m and comprising a long central chamber leading off to 12 cells (Davidson and Henshall 1989, 121). Thomas recorded pecked designs on several areas of internal stonework during his investigations (RCAHMS 1946b, 186); further examples were noted and illustrated by Petrie when he visited with Robert Hebden, the owner of Eday, a few years later (Petrie 1857, 61). The markings are within the main chamber and comprise up to 11 examples of curvilinear and geometric motifs (Davidson and Henshall 1989, 81, plate 24; Mazel et al. 2007). Unfortunately, it was another 50 years until the tomb was taken into Guardianship. In the intervening period, it suffered significant deterioration and few of the carvings are now visible.

One stone in particular (Petrie’s no. 3, shown in Figure 20), has attracted attention for its ‘eyebrow motif’. The double-arcs and dots on this stone are arguably suggestive of a human face, and have frequently been compared to some of the designs on the Folkton drums (RCAHMS 1946b, 189). One of the decorated stones from the Links of Noltland has a clear likeness to the stone from the tomb and parallels can also be drawn with the facial markings on the Westray Wifie’ figurine recovered from the settlement (Moore and Wilson 2011).

Eday Manse

Not long after visiting the Holm of Papa Westray with Petrie, in 1861, Robert Hebden donated an elaborately spiral-decorated stone from Eday to the Society of Antiquaries of Scotland (Gibson Craig 1863, 185). The stone was from a ruinous mound, the remains of a prehistoric structure which had been destroyed in 1821 for the construction of the adjacent United Presbyterian church (itself a ruin within a few decades). There are no contemporary accounts of the destruction, but forty years later Hebden recorded ‘from the description of old people’ details of a long passage which opened out in several sub-circular cells, within a building some 18m by 9m in size (ibid.). He found the stone lying face down at the entrance to one of the passages but it was presumed to have been a lintel (Davidson and Henshall 1989, 117).

Subsequent records describe a substantially larger mound, at some 34m by 16-17m and oriented roughly north-south (ibid.) and the size and layout of the Eday Manse tomb invite comparison with the Holm of Papa Westray South tomb. The stone has a pair of spirals and two sets of concentric circles, and a third and fourth set of circles just visible where it is broken along one long edge. Early accounts describe it as having been split in order to be used as a lintel in the construction of the church (Gibson Craig 1863, 186). Its sister stone was not found when visited by the then Orkney Archaeologist Raymond Lamb in 1981 (RCAHMS 1989a, 10), nor when I looked, but Alison Sheridan has noted a weathered carving amongst the church ruins (Alison Sheridan pers. comm.).

Pickaquoy

A further pecked spiral decorated stone, donated to the NMS by James Farrer in 1864, was recovered from a site at Pickaquoy, near Kirkwall, although its original context is not clear (RCAHMS 1946b, 162). Farrer excavated the site in 1853, but it was unrecorded until Petrie saw it some years later, by which point it was severely dilapidated. Petrie suggested it was ‘a barrow containing two built cists or graves, or a Pict’s house’ (Petrie 1857, 61). The stone was built upright into the wall of the larger of the two cells, and a further decorated slab (now lost) was also found, which had ‘13 small cavities along one of its sides, and a rather larger cavity about the centre of one of its sides’ (ibid.). Petrie noted the similarity between the working on both of these stones to those in situ at the Holm of Papa Westray tomb (ibid.). Later descriptions interpreted the site as a burnt mound (RCAHMS 1946b, 162), but its classification remains unclear.

Pierowall and Howe

Nearly 120 years later, in 1981, during quarrying activity at Pierowall, Westray, a further spiral-decorated stone was discovered which could be considered ‘close in spirit, in design and in execution to the best in the Boyne valley tombs’ (Davidson and Henshall 1989, 82). Subsequent fieldwork found a multi-period site comprising the remains of a Later Neolithic chambered tomb which had been demolished and paved over; there was then a hiatus in use until the early Iron Age, when a roundhouse was constructed on the site (Sharples 1984). Together with a refitting piece which was found during excavation, the large decorated stone was saturated with carved and smoothed spirals and concentric arcs, and interpreted as the lintel for the tomb entrance. Two
smaller stones, decorated with pecked spirals, were recovered from the quarry spoil heaps but their original position is unknown (op. cit., 4-5). The following year, two decorated stones were found during the excavation of another multi-period site at the Howe, Stromness (Ballin Smith 1994). Given the similarity of the earliest phase with recently excavated buildings at the Braes of Ha’Breck, the Knowes of Trotty and Smerquoy, it seems likely that Howe originally comprised a pair of Early Neolithic houses, which were subsequently overlain by a Maeshowe-type tomb. This had a broch superimposed on its partly levelled remains in the Iron Age, at which point the tomb was re-used as a souterrain (Davidson and Henshall 1989, 82). The passage grave had masonry which was on a par with that at Maeshowe, and also had a clay capped mound, an external ditch, and a probable standing stone (Ballin Smith 1994, 10-19). A multi-cupped stone was re-used to form part of the tomb facade on the south side of the entrance passage to the Neolithic passage grave, whilst a fragment of a larger piece bearing a pecked zigzag design was recovered from an Iron Age rubble context, but compares well to one of the Holm of Papa Westray South examples (op. cit., 13, 209-210, Illus. 127).

**Incised stonework in tombs**

The Holm of Papa Westray, Eday Manse and Pickaquoy were the only three Orkney sites listed by Shee Twohig in her synthesis (1981, 228-229), which was published just before the Pierowall and Howe stones were discovered. In their common use of pecked, curvilinear and spiral decoration, these carvings are considered directly related to those from Newgrange and other sites in the Boyne Valley, Ireland (Shee Twohig 1997, 387). These have dominated discussions of ‘megalithic’ art in Orkney, and are frequently cited as further evidence of the links between Irish passage graves and Maeshowe-type tombs (Eogan 1992, 123).

In the late 1980s, the possibility of a rather different, and subtler, form of passage grave decoration emerged in Orkney. At Maeshowe, Patrick Ashmore reinterpreted Farrer’s No.31, which had previously been dismissed as a Norse doodle, as a likely Neolithic carving (Ashmore 1986). He also noted further incised markings throughout the tomb that bore a striking similarity to those found at Skara Brae and some examples of Irish megalithic art (op. cit., 58-59). Then, in the late 1990s, Richard Bradley
noticed similar incised motifs in Quoyness, Sanday, and in Cuween, Firth. These were promptly published (Bradley 1998b) and led to a wider survey of the accessible tombs in Orkney; further incised markings were found at Maeshowe, in addition to ‘new’ examples at Cuween, Quoyness, Wideford and the Holm of Papa Westray South (Bradley et al. 2000). Almost all of the designs were linear patterns of vague intersecting lines occasionally forming chevron or cross-and-lozenge motifs (Figure 21). The Maeshowe assemblage will be discussed in Chapter 4.
With the exception of the Holm of Papa Westray, which also has pecked decoration, all of the tombs in the survey had only incised motifs. Bradley’s team found that thresholds, and in particular the entrance to the central chamber, formed particular _foei_ for decoration; and a distinctive right-hand emphasis to the incised markings demonstrated through the number of carvings, the skill in their execution, and the range of heights above floor level at which they were found (Bradley _et al._ 2000, 60). This appeared to not only conform to the spatial patterning of decoration observed at Irish passage graves (Herity 1974, 123), but also that identified by Richards at Skara Brae (Richards 1991; see Chapter 5), and mirrors the wider spatial organisation and layout seen in the architecture as a whole. Nevertheless, their apparently casual and ephemeral nature suggests a rather different expression than the visually arresting pecked designs associated with the Eday Manse and Pierowall tombs.

In 1998, a ‘new’ tomb was discovered at Crantit, just outside Kirkwall. Measuring just 3x3m internally, the semi-subterranean chamber was divided with orthostatic partitions (Ballin Smith 2014). The westernmost of these had incised markings on its SE face forming a boxed geometric design (op. cit., 28, illus. 29). A human skull was found at the foot of the orthostat, which faced the entrance ‘passage’; a gap between the roof slab and the entrance lintel suggests a ‘light box’ feature.

_In situ_ decoration has now been recorded at nine tombs in Orkney; five of these are currently accessible and were visited during my survey. In each of these visits, previously-unrecorded carvings were noted; the actual number of examples may be much higher.

**Decorated stone in domestic contexts**

Until recently, the majority of decorated Neolithic stonework known from Orkney came from a domestic, rather than a passage grave site: Skara Brae. Gordon Childe noted a large number of decorated stones in the 1920s, and recorded motifs ranging from ‘random scribblings’ to ‘carefully executed designs’ concentrated in the passages and in Houses 7 and 8 (Childe 1931c, 150). More decorated stones were found during the 1972-4 excavations, and both Elizabeth Shee Twohig (1981) and Alexandra Shepherd (2000) added to the assemblage. Including the results of my 2011-2014 survey, the number of known decorated stones from Skara Brae now stands at over a hundred, 75 of which are currently _in situ_ (Chapter 5). Skara Brae’s domestic context has nevertheless continued to prove problematic, and as a primarily non-flanery site it has frequently been excluded from discussions of Neolithic art (e.g. Nash 2012, 137). Nevertheless, decorated stonework is now known from seven settlement sites in Orkney and has been found _in situ_ on walls and other architectural elements at the Links of Noltland, the Ness of Brodgar and Smerquoy in addition to Skara Brae. It is no longer tenable to dismiss such a common and integral feature of Orkney’s Neolithic domestic architecture. I discuss Skara Brae’s assemblage in Chapter 5.

The ongoing excavations at the Links of Noltland, Westray, where the famous ‘Orkney Venus’ carved sandstone figurine was found in 2009, have produced a range of cup-marked, pecked, incised and carved decorated stones with a variety of linear and curvilinear motifs (Moore and Wilson 2011); several of these were _in situ_ and recorded during my visits in 2013 and 2014. This site is currently still being excavated and as such a full record of this important assemblage is not yet available.

In 2010, a decorated flagstone slab was found at the Early Neolithic settlement site of Green on Eday, which exhibits a series of pecked designs that are similar to those in the Holm of Papa Westray South tomb, and include a triangle, and several conjoined spirals (Coles _et al._ 2010; see Figure 23). These overlie a series of fine, incised motifs but do not respect them. The slab was deliberately placed in the entrance to a dwelling when the building went out of use and the freshness of the pecking suggests that the stone was not re-used (op. cit., 16). As such, it seems reasonable to suggest that this stone was decorated as part of the ‘decommissioning’ of the building (Card and Thomas 2012, 114). A flagstone slab with an extensive carved and pecked chevron and dot design was found in a similar context within the demolition layers infilling Structure 9 at Pool on Sanday (Hunter 2007, 49, illus. 3.18).

In 2013, the excavation of an Early Neolithic dwelling at Smerquoy, St Ola, led to the surprising discovery of a pecked spiral decorating an _in situ_ stone by the entrance to the house (Figure 24). When this stone was removed, further pecking was seen on the side which faced into the wall, indicating its decoration prior to being built into the structure. In style, the pecked joined spirals are strikingly similar to those seen on the stones from the Later Neolithic tombs at Pierowall and Edøy Manse. Post-exavication analysis and phasing work is continuing at Smerquoy, but at present it seems that this stone was part of the primary phase of build, and as such offers a further rare example of Early Neolithic decorated stonework in a domestic setting. Radiocarbon dating has allowed it to be provisionally assigned to c. 3200BC - Orkney’s oldest known Neolithic art (Colin Richards, pers. comm.).

A decorated slab from Barnhouse was recovered from the field surface, but was thought unlikely to have moved very far and interpreted as deriving from a lower course of walling in either House 5c or 5d (Downes and Richards 2005, figure 4.29). This has a range of incised
Figure 22. SB14_10, one of the ‘new’ incised designs of infilled chevrons from House 7, Skara Brae (photograph with digitised overlay to highlight incised lines). Image © Antonia Thomas.

Figure 23. Pecked stone from an Early Neolithic dwelling at Green, Eday. Face is approximately 580mm wide. Image © Antonia Thomas.
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Figure 24. Pecked stone from Early Neolithic house at Smerquoy, St Ola. Face is approximately 330mm wide. Image © Antonia Thomas.

Figure 25. Refitting pieces of a decorated cist slab found at the Ness of Brodgar during excavation in 2006-7. Image © Antonia Thomas.
and carved markings including zigzags and cross-and-lozenge motifs, which are similar to those which have been found both at Skara Brae and at the Ness of Brodgar.

**The Ness of Brodgar**

Up until 2006, therefore, the number of decorated stones from Neolithic sites in Orkney numbered in the region of less than 100 individual examples, of which almost all were from Skara Brae. The discovery in Trench J at the Ness of Brodgar of a slab with incised decoration (Figure 25) in 2006 was consequently an unusual, if not atypical find, for a Later Neolithic site in Orkney. It consisted of a thin slab within the upper fill of a cist bearing cross-and-lozenge decoration; the following year, two adjoining pieces were found and incised decoration was also noted in situ on the walls of Structure 1, 7 and 8 in Trench P. These were comparable to examples previously recorded at Skara Brae, Barnhouse and the passage graves surveyed by Bradley *et al.* The first indication of decorated stonework on the site had of course been the Brodgar Stone in the 1920s; in 2010 the stone was demonstrated to have come from Structure 18 at the Ness of Brodgar.

Up to the end of 2014, nearly 600 decorated or dressed stones had been recorded from the site alone; even the most conservative figure, obtained by removing unstratified finds and those with indeterminate markings from the assemblage, leaves over 400. Over half of these have been found in situ within upstanding structural elements. The markings are overwhelmingly linear and geometric, with designs that are both comparable to those seen at other sites in Orkney and motifs that are unique to the site (Figure 26). The decorated and dressed stone assemblage is characterised as much by its variety as by its size, consisting of worked architectural stone and portable pieces with lightly incised 'scratch art' and carved markings including zigzags and cross-and-lozenge motifs, which are similar to those which have been found both at Skara Brae and at the Ness of Brodgar.

Motifs and execution

The long exposure of the buildings at Skara Brae had led to questions over the authenticity of the carvings (Nash 2012, 137), something that could also be argued for the incised motifs in passage graves (Bradley *et al.* 2000, 55). The discovery of large numbers of in situ stones from the Ness of Brodgar, from sealed deposits, demolishes any of these doubts. In terms of both motifs and techniques of execution, the Ness of Brodgar assemblage can be directly compared to the carvings from Skara Brae and the tombs covered in Bradley *et al.*’s survey. This underlines the importance of the excavations at the Ness of Brodgar and the timely nature of the research discussed here; never before has such an analysis of Neolithic art in Orkney been achievable. It also means that it is possible to produce a comprehensive ‘catalogue’ of designs and processes related to Neolithic stoneworking and decoration in Orkney (Figure 26). This provides a baseline from which to re-analyse other assemblages, and identify markings as Neolithic with the confidence of strong comparable material. For the specific purposes of this thesis, this has allowed new fieldwork to be undertaken at Maeshowe and Skara Brae and the recording of a number of previously-unknown carvings at each site.

Although previous discussions have largely been limited to pecked, curvilinear designs like the Eday Manse and Holm of Papa Westray stones (i.e. those most readily comparable to the Irish examples), there is now a diverse range of stone decoration known from Neolithic Orkney. The most common form of decoration is intaglio, i.e. incising or carving. Incised lines are frequently overlain with deeper carvings, suggesting that they may have been used for sketching out designs. In both cases, sharp flint tools seem to have been used, with the deep V-profile of carved lines made by repeated use. At Skara Brae, Childe recognised four techniques of stone decoration: (i) simple scratchings; (ii) engraving involving deeper incisions; (iii) carving yielding deep V-shaped grooves, and (iv) pecking from a chisel-like tool (Childe 1931c, 150–151). In my fieldwork, I have conflated the first two as ‘incising’ but retained carving as a separate category.

In Orkney, incised and carved motifs are dominated by linear, angular designs, in particular parallel vertical and diagonal lines, occasionally radiating or intersecting to form lattice or net patterns. Chevrons and zigzags are common, as are banded designs, comprising parallel lines infilled with parallel bends, chevrons, zigzags or cross-and-lozenge motifs (as seen on the Brodgar Stone, with its ‘veritable thesaurus of incised geometric decoration’: Saville 1994, 109). Incised decoration is either ‘edge-to-edge’, extending to the edge of the face of the stone or ‘free’; for stones within wall-faces, this has implications for when the stone was decorated in relation to construction, an important, but frequently overlooked aspect.

At Skara Brae (and the Ness of Brodgar), a predominant motif is a repeated saltire which forms ‘cross-and-lozenges’, quite distinct from discrete lozenges (Shepherd 2000, 146). Variations on this also appear in the form of opposed triangles and opposed fan motifs. Of course, the marks are rarely as discrete or typical as those shown in Figure 26, and comparing motifs in isolation is misleading: they need to be looked at...
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Cups and concentric rings | Meandering signs | Spirals | Chevrons and zigzags | Saltires and opposed triangles | Lozenges and triangles | Parallel lines and grids
---|---|---|---|---|---|---
• | ○ | • | • | • | • | •
• | • | • | • | • | • | •
• | • | • | • | • | • | •
• | • | • | • | • | • | •
• | • | • | • | • | • | •

Figure 26. Stylised examples of typical Neolithic art motifs found in Orkney. Image © Antonia Thomas.

<table>
<thead>
<tr>
<th>Technique</th>
<th>Maeshowe</th>
<th>Skara Brae</th>
<th>Ness of Brodgar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incising</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Carving</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pecking Random</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pecking Discrete Cup-marking</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
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<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Drilling Cup-marking</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
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<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Bas relief</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Chiselling</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>

Figure 27. Forms of Neolithic stoneworking and decoration found in Orkney showing their presence at the main sites discussed in this thesis. Image © Antonia Thomas.

as assemblages (Bradley 1997a, 42). Most designs combine several elements, and overlays and sequences are common, rendering the identification of particular ‘motifs’ arbitrary and futile. Discrete motifs are relatively unusual, with the opposed-fan motif peculiar to the Ness of Brodgar, a rare example. Curvilinear, meandering and protospiral designs, which have dominated the literature due to their similarity to Irish examples, are atypical.

When they do appear, Orkney spirals often occur in pairs, joined 'spectacle-fashion', a feature rarely seen in Irish passage grave art (Shee Twohig 1997, 387). Cup-marks are unusual throughout Orkney as a whole, yet frequent at the Ness of Brodgar, where they appear to be associated with particular contexts. Pecking - either by direct or indirect percussion - is frequently recorded. This can be discrete, forming crude circular areas or
cup-marks, or more random, the latter often defacing or obliterating earlier marks. Discrete pecked motifs are often subsequently smoothed with grinding to form cup-marks, the smaller of which (c. 10-20mm diameter) are often drilled.

Pick-dressing is relatively rare in Orkney, and with the exception of Maeshowe and the Ness of Brodgar, is only found at the Dwarfie Stone, and the Stones of Stenness. *Bas relief* dressing has so far only been recorded at the Ness of Brodgar. Chiselling is distinctive, and solely recorded at Maeshowe and the Ness of Brodgar. It overlies pick-dressing at both sites.

There is thus a diversity to the techniques of stoneworking (Figure 27) that cannot be easily explained by approaches that focus upon motif alone. It is important, therefore, to look beyond formal similarities to explore the processes of their creation, and this provides a central theme in this thesis. There is also a marked correlation between type of stone and the technique of working, with cup-marking and pick-dressing almost exclusively on the coarser grained sandstones, and incised and carved decoration associated with laminar flagstones. The latter are frequently polished prior to incising, allowing the lines to be more visible, similar to the way in which pigment may have also operated (Bradley et al. 2000, 54). The possibility that painted stones were a feature of the Orcadian Neolithic was first suggested by the discovery at Skara Brae of small ‘paint pots’ containing the residues of red and white pigments, or even entire lumps of ochre, and frequent haematite nodules (Childe 1931c, 117). The discovery of actual painted stonework at the Ness of Brodgar made this possibility a reality (Card and Thomas 2012). These stones are currently awaiting conservation and analysis and will form the focus of future research.

**Neolithic decorated stones re-used in later contexts**

In addition to the sites discussed above, several probable Neolithic decorated stones have been identified in Bronze Age and Iron Age settings in Orkney. A flaked block of sandstone bearing incised and pecked decoration formed part of rubble packing around a cist slab at Ferndale, Rendall (MacGregor 2005). The stone had decoration on three surfaces, with a pecked rectangle on one face, and incised lines forming a ‘roughly executed series of lozenges or triangles’ (op. cit., 11). The cist contained a cremation, radiocarbon-dated to the early 2nd millennium BC, and the stone was interpreted as re-used (Duffy 2005, 16).

Two decorated stones were discovered at Midhowe Broch during its excavation in the 1930s. A cup-and-ring carved stone, with seven or eight cups and up to four partial rings, was found built into the NE outer wall of the broch tower, and a further cup-marked stone which had ‘twenty-one shallow cups impinging on each other’ was noted in a late building to the south of the main structure (Callander and Grant 1934b, 485). A substantial block of pick-dressed sandstone with a pecked spiral was removed from the Broch of Redland (Steeringlo) in Firth and is now in the NMS (RCAHMS 1946b, 91). It was excavated by Farrer in 1858, who recorded the stone as propping up ‘a rudely built facing’ wall (op. cit., 99). A lintel stone in the souterrain at Windwick, South Ronaldsay had several small cups drilled into its surface, and may also be Neolithic in origin (Martin Carruthers, pers. comm.). These examples may be understood within a wider pattern of evidence for Iron Age activity at Neolithic monuments in Orkney, often after a hiatus of attention during the Bronze Age. This is manifested in several ways: the destruction or restructuring of sites in the Early Iron Age, the clearing out and replacement of Neolithic material with Iron Age artefacts, the maintenance and control of access to Neolithic sites, and their re-use (Hingley 1996, 1999; A. Thomas 2003).

A weathered sandstone, pecked with two sets of concentric circles, was recently found on a South Ronaldsay beach and compares well to the known Neolithic examples, although its original provenance is not known (Towrie 2008). Several further examples have been re-used in post-medieval buildings. At Arsdale in Evie, a stone decorated with two weathered pecked spirals is built into the wall of a workshop; this was removed from a ruinous mound, no longer extant, on the farm (RCAHMS 1946b, 85). A stone with several cup-marks is set into the base of the wall in the northwest corner of a byre at the farm of Quoys, Hoy (RCAHMS 1989b, 17) but it is not known where this originated. Although beyond the remit of this thesis, the re-use of prehistoric decorated stones in post-medieval buildings is a fascinating area of study in its own right, and offers the possibility to explore the longer-term biographies (and ‘afterlives’) of carved stones. Several other stones, which from their description or context are comparable to known Neolithic examples, are described in anecdotal accounts, or appear in drawings and photograph but the current location of many of these is no longer known.

**Portable art and artefacts**

There are several portable stone items within the assemblage from Skara Brae, which have decoration akin to that seen on the structural stones. An incised stone ball from House 2 bears a geometric motif (Balfour Stewart 1914, 347, Fig.3; see Figure 29); the pattern on this, and on the three-pronged stone object found in the ‘market place’ in 1929 (Childe 1931c, 109) are directly comparable to those seen on architectural contexts on the site. Two stone knives from Skara Brae are also decorated (Childe 1931c, 114; Saville 1994, 107). Skara Brae is also unusual in Orkney for having a large assemblage of (both worked and unworked) bone
surviving. Several bone items bear carved designs similar to those seen on the site’s stonework; the decoration of bone and other organic materials, such as wood, may have been much more widespread in the Neolithic. No Early Neolithic portable decorated stone artefacts are yet known from Orkney, but the discovery of a carved stone ball decorated with ‘herring-bone patterns and crudely carved concentric circles’, found in association with Unstan ware at Loch Olabhat in North Uist (Armit 1988), may indicate that this is merely due to a gap in the record. Several portable decorated items have been recovered from the excavations at the Ness of Brodgar and are discussed in Chapters 6 and 7.

**Grooved ware**

Grooved ware pottery is frequently discussed as forming part of the same Neolithic visual culture ‘package’ as megalithic art (e.g. J. Thomas 2005, 170; Bradley 2009, 100-101). As elsewhere in Britain and Ireland, there are clear commonalities between the decoration on Grooved ware pottery in Orkney, and the contemporary carvings seen on stone. At Skara Brae, Barnhouse, and the Ness of Brodgar (Roy Towers, pers. comm.), zigzag and wavy lines dominate the Grooved ware decoration, although sherds with spiral decoration have also been found at Skara Brae (Childe 1931a, 67-8, Fig.27; Clarke 1976a, 20) and the Links of Noltland (Hazel Moore, pers. comm.). Applied pellets frequently used as decoration on pots can be compared to the small cup-marks found on decorated stones (Shepherd 2000, 152). A link between stone and ceramic decoration is further suggested by the discovery at the Links of Noltland of a clay figurine bearing incised geometric markings (Moore and Wilson 2011). Red pigment has also been identified on several sherds of Grooved ware pottery from the Ness of Brodgar, which is particularly significant given the recent discoveries there of painted stonework (Card and Thomas 2012).

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2 Comparative analysis of the large Grooved ware assemblage from the Ness of Brodgar with the decorated stones may form an important avenue for future research, but is not currently possible as the pottery from the site is awaiting conservation and not accessible.
DISCUSSION

Over the last few pages, I have summarised the different types of decoration – on both architectural and portable stone, and in other media – found in Neolithic contexts in Orkney. I have presented the motifs, techniques of execution, where the designs are found and their similarity to examples found in other areas, chiefly Ireland. These aspects are common to many discussions of Neolithic art (Chapter 2); indeed, many narratives start, and end, with such descriptions. But the particular nature of the Orkney art and architecture exposes a number of problems with the traditional approach and suggests that we need to go further, asking different questions of the material. At the heart of the problem is a series of interrelated assumptions regarding the similarities between Orcadian and Irish passage grave art, a perceived dualism between ‘domestic’ and ‘funerary’, and the persistence of typological classifications in art and architecture. Common to all these issues is the superficial treatment of context, and the focus upon *form* to the exclusion of *process*.

*Orkney and Ireland*

In Chapter 2, I considered approaches to art in archaeology and the wider context of Neolithic architecturally-situated carvings in Britain and Ireland. I argued that interpretations have tended to prioritise the superficial appearance of art and architecture. These biases are brought into sharp focus with an analysis of the way in which decorated stonework has been discussed in Orkney. With the visual form of Neolithic carvings consistently prioritised, it is not surprising that the visually arresting corpus of Irish passage grave art has provided a baseline for studies of comparable material. In relation to Orkney, it is frequently only those forms of stoneworking and decoration which compare to the Irish examples that are included in discussions. For example, within a recent synthesis of European megalithic art (Nash 2012), only three Orkney sites were deemed worthy of mention: the Holm of Papa Westray, Eday Manse and Pickaquoy (op. cit., 138). But although these sites (and Pierowall) invite direct comparison with the megalithic carvings from Ireland (Shee Twohig 1997, 387), they are *exceptional*. Accounts which discuss Orcadian ‘megalithic art’ and that of the Boyne Valley have consequently been based upon a very limited assemblage, but these exceptional sites have been used as the basis for typological classifications (Richards 1993b). This has led to a series of assumptions about what Neolithic stoneworking and decoration in Orkney should both look like, and mean, and these preconceptions have had a subtle but far-reaching influence, not only upon interpretive accounts but also recognition in the field (cf. Downes and Richards 2000, 159). As a result, it was not until the 1980s that some of the carvings in Maeshowe were reconsidered as Neolithic (Ashmore 1986). Subsequent surveys have revealed that other tombs also had a wide range of incised markings (Bradley et al. 2000), but these remain as a whole overlooked by wider archaeological syntheses of passage grave art (e.g. Nash 2012), presumably because, despite their funerary context, they do not conform to expectations about ‘megalithic art’, i.e. that it has to look like the Irish carvings. The focus upon the Irish style has diverted attention away from the heterogeneity of stoneworking and decoration in Neolithic Orkney. Orkney was certainly connected to other areas including Ireland, and this is clearly evidenced by the commonalities in passage tomb design, decoration and material culture. But despite the connections with other areas, it seems that Orkney had a distinctive vernacular style. People drew on ideas from a wider Neolithic world – including Ireland – but used them as the basis for a *very local* expression of identity. This will be discussed in more detail in Chapter 9.

*Ritual / domestic*

In Chapter 2, I argued that one of the most enduring, and problematic, assumptions about prehistoric carvings is the idea that they represent the ‘ritual expression’ of a ‘symbolic code’ (Nash 2012, 134). This idea endures in part because of the association between Neolithic art and funerary sites. In Orkney, however, there are also Neolithic carvings in domestic settings, and until recently, Skara Brae contained the largest assemblage of architecturally-situated carvings in Britain. But if ‘megalithic art’, is a phenomenon which is exclusively found within a burial context (e.g. Nash 2012, 138), this creates the paradox of otherwise identical, and contemporary, forms of stone treatment being classed differently. With the ‘ritual’ and ‘domestic’ spheres seen as mutually exclusive realms of human activity, the evidence from Skara Brae becomes problematic. For Nash, for example, only the site’s zigzag motifs are worthy of discussion because they superficially resemble decoration within Fourknocks passage grave (op. cit., 137). The remainder of Skara Brae’s decorated stonework is dismissed as ‘bearing little resemblance to megalithic art; it may in fact, be…associated with more mundane activities’ (ibid.).

This statement reinforces the age-old assumption that material in domestic contexts is ‘functional’, and in direct opposition to ‘burial/ritual’ (Lane 1986, 181-182; Bruck 1999, 318; Bradley 2005, 201-202). Such a dualism even has shades of a Childean notion of discrete cultural identities: a ‘Megalithic Culture’ seen in opposition to a ‘Skara Brae Culture’ (cf. Richards 1995, 124). This opposition is hard to sustain. Beneath a wall of House 7 at Skara Brae, for example, was a cist containing two burials; whilst at Barnhouse there are ceremonial buildings and dwellings contemporary with, and close by the Stones of Stenness. Across Orkney, both houses and
tombs are decorated, with both incised, angular motifs, and pecked, curvilinear designs appear in either setting. At the Ness of Brodgar, the buildings combine elements associated with dwellings such as hearths and dressers, with megalithic architecture, and the largest assemblage of dressed and decorated stone outside of the Boyne Valley. There are far more nuances to architectural and material ‘types’ in the Orcadian Neolithic than traditional classificatory schemes suggest.

Typologies and chronology

Earlier on in this chapter I noted the persistence of typological schemes in discussions of Orkney’s Neolithic architecture. One reason for this persistence may be the perdurance of stone; perhaps the defining characteristic of Neolithic Orkney. With the exception of a small area of granite around Stromness, and igneous intrusions throughout the islands (many of which provide raw material for a range of artefacts), Orkney’s solid geology is largely comprised of sedimentary sandstone.3 It is hard to imagine a better building material for prehistory; not only durable, but easily quarried, transported and assembled. But the dominance – both tangible and theoretical - of stone in the Orcadian Neolithic has also meant that other architectural materials and forms have been largely overlooked. This can be seen in the presence of timber buildings, something that was, until recently, not even considered a possibility. The evidence from Wideford and Wyre opens up the potential that there were a range of different types of building in the Orcadian Neolithic, many of which might be almost invisible archaeologically, and which might not fit neatly into typological ‘boxes’.

This offers a cautionary tale, as it suggests that we only see what we expect to see, and that we find only what we look for – something that is apparent in not only the treatment of stone architecture, but also in the way its constituent elements are worked and decorated. Typological classifications persist in studies of art and architecture, of course, because it is their visual characteristics which are assumed to take precedence over other aspects. This will be explored in more detail in Chapter 8. Such discussions rely upon idealised architectural types and assume what appears to be the final form as of overriding and singular significance in the life of a site (Richards 1993b).

Recent dating programmes are undermining many of these traditional typological assumptions about the Neolithic in Orkney. It is increasingly clear that rather than there being two simple sub-periods of an Early and Later Neolithic, each with distinctive forms of building and material culture, there was actually a wide variability in art and architecture that cuts across the traditional Childean cultural divides. Moreover, many of Orkney’s Neolithic buildings were inhabited over considerable durations and saw major modifications during their lives. To focus upon the form of just one of these stages therefore misses the complexity of their biographies, and the question of when particular stones were carved within these durational sequences is rarely addressed. To understand why Orkney’s Neolithic art and architecture look the way they do, and why that was meaningful, we need to explore the broader implications of the construction process that allowed buildings to emerge – and keep on emerging - through time (cf. Richards 2013).

Process, temporality and context

These biographies were not limited to the buildings themselves, but would have radiated out to the wider landscape through the procurement of particular materials (cf. Richards 2013, 3-4). In Neolithic Orkney, this would have required engagement with a world beyond the site, linking not only different places but also different times. As such, we need to explore the specific context of carvings at different stages of construction and occupation, and the different types of attention afforded to stones and buildings over time. In this thesis, these ideas will be explored through the themes of process, temporality and context. These are discussed in more detail in Chapters 7, 8 and 9.

SUMMARY: ORKNEY

I began this chapter with a discussion of the history of research into Neolithic Orkney and the rich resource of antiquarian and historical records pertaining to the islands’ archaeological heritage. Extensive excavation and restoration work by the Ministry of Works in the 1930s in Orkney has left the islands with a host of upstanding Neolithic monuments. There are eleven tombs in the Guardianship of Historic Environment Scotland which are roofed and accessible, and uniquely, two Neolithic domestic sites which can also be visited. Many of these sites are decorated, and as a study area, Orkney allows an unparalleled investigation of Neolithic art and architecture. Nevertheless, the legacy of both antiquarian attitudes to monumentality and Childean views of discrete cultural identities endures today, particularly in the discussion of Maeshowe and Skara Brae, so often presented as the ‘type-sites’ for Later Neolithic funerary and domestic architecture respectively.

3 Although all of the sedimentary rock in Orkney is strictly sandstone, in this thesis, I use ‘sandstone’ in the vernacular sense as a shorthand for the Eday bed sandstone, to distinguish it from the ‘flagstone’ of the Rousay and Stromness beds. There is considerable variation within these simple categories: Stromness Flags are softer and weather to a golden orange colour, whilst Rousay Flags are more laminar and weather to a darker grey. Within the Eday beds, the coarseness of grain varies dramatically, and colouration ranges from a mid-dark brown through red, pink, orange and yellow to a creamy buff.
Despite the long attention afforded to Orkney’s Neolithic monuments, there has been little consideration given to their constituent stonework and decoration beyond a few exceptional examples (Richards 1991; Bradley et al. 2000; Shepherd 2000). Discussions frequently focus upon perceived aesthetic qualities and form, predicated on comparisons with the Irish sites and the search for a singular meaning (e.g. Nash 2012). This is paralleled in the manner in which the buildings themselves have been studied; which are classified into formal ‘types’ on the basis of apparent structural similarities and treated like objects created by a single event of construction (cf. Richards 1993b, 147). This reductionist approach is partly due to the way in which we encounter the archaeology. Many Orcadian sites were ‘excavated’ in the 19th century or earlier, whilst for much of the 20th century, the main objective of archaeological work was to provide monuments for public display rather than research (Card 2005b, 43). The current appearance of many buildings is thus ‘heritage-stabilised’ (cf. Pollard 2013, 190), and frozen in the time of their discovery and excavation (Bailey and McFadyen 2010, 563). The processes by which those buildings emerge are rarely seen or discussed, with the result that few studies engage with the question of when particular stones within buildings might have been carved. This is a crucial question. The buildings are not the result of a single phase of activity, and nor are their constituent elements. At a range of scales, the subtlety, complexity and context of stoneworking and decoration in Neolithic Orkney has been overlooked.

The discovery of large numbers of in situ stones from the Ness of Brodgar, from secure Neolithic deposits, puts us in a position to challenge these assumptions and allows a reassessment of comparable material and sites in Orkney. It is only with the excavations at the Ness of Brodgar that the opportunity has arisen to interrogate fully the subtleties of construction and occupation in relation to decorated stonework. In particular, the affordances of excavation, and the quality of the evidence from the site allow an exploration of process, temporality and context that has never before been possible. These themes run through this thesis and are examined in more detail in Chapters 7, 8 and 9. In the next three chapters I present the assemblages and contexts of Maeshowe, Skara Brae and the Ness of Brodgar.
4. MAESHOWE

Figure 30. Mason’s mark and date of 1865, Maeshowe. Image © Antonia Thomas
INTRODUCTION

In Chapter 2, I discussed approaches to art in archaeology. I argued that many studies prioritise superficial form over process, and highlight the visual characteristics of carved stones to the exclusion of the processes by which they came to be selected, carved, placed and appreciated. This can be said of the way in which many forms of visual culture have tended to be treated in archaeology, but is particularly acute in discussions of architecturally-situated art. Here, although context is of fundamental significance, it is frequently treated as if it provides nothing more than a passive backdrop, or gallery space, in which to view art. This is partly because of the way in which prehistoric buildings have tended to be treated. The subtleties of long durations of attention, and the wider social context of stoneworking and construction become obscured, overlooked in an emphasis upon the ‘final’ form of buildings. Discussions rarely look beyond the surface to explore the processes by which buildings came to emerge – and keep on emerging - through time. I argued in Chapter 3 that such an approach has been particularly dominant in discussions of Neolithic Orkney, where it is encouraged by the high visibility and apparent perdurance of the monumental stone-built remains. Foremost amongst these is the passage grave of Maeshowe, perhaps Neolithic Orkney’s most monumental site of all. Coupled with the recent discoveries of in situ Neolithic carvings on its internal stonework, therefore, Maeshowe provides one of the main springboards for the exploration of Orkney’s prehistoric art and architecture in this thesis.

Situated in Orkney’s west Mainland, in the parish of Stenness, the passage grave of Maeshowe is less than 1.5km east of the Ness of Brodgar, on gently sloping land east of the Harray Loch. Barnhouse village and the Stones of Stenness lie around 1km away to the west and west-southwest respectively (Figure 31). The Ring of Brodgar, some 2km to the northwest, is clearly visible from the tomb, whilst the Hoy hills provide a dramatic horizon to the southwest. These relationships and alignments are significant: Maeshowe’s passage is oriented northeast-southwest, with the Barnhouse Stone in a deliberate exploitation of the passage of the setting sun at midwinter. The retreating sunlight appears to dance along the Hoy hills, disappears, and then reappears to strike the Barnhouse Stone and shine down Maeshowe’s passage, illuminating its rear (northeast) wall and cell.

![Figure 31. Location of Maeshowe within the Stenness-Brodgar area. For wider context see Figure 15. Image © Antonia Thomas, after Historic Scotland 2014a: 8, Map 3 and using open-source map data licensed under Creative Commons.](image-url)
In this celestial alignment, it is directly comparable to the great passage grave of Newgrange in the Boyne Valley, and also shares commonalities in layout, structure and internal decoration. Despite these similarities, however, Maeshowe is unique. The quality of its architecture and construction, the size of its masonry and the scale of the interior have been considered many times (Petrie 1861; Farrer 1862; Stuart 1865; RCAHMS 1946b, 306-313; Childe 1956; Henshall 1963, 219-222; Renfrew 1979; Davidson and Henshall 1989, 142-6; MacKie 1997; Challands et al. 2005). Now part of the Heart of Neolithic Orkney World Heritage Site, Maeshowe sits in the middle of cultivated grassland adjoining the A965, the main road between Stromness and Kirkwall, a convenient location for a monument which saw nearly 24,000 visitors in the year 2013-2014 (Historic Scotland 2014b). Nevertheless, there are many unexamined aspects to this exceptional monument. In this chapter, I will present the background to, and history of research at Maeshowe before reporting upon the initial results of my own examination of stoneworking and decoration at the site.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Maeshowe features in one of the earliest written accounts of Orkney, the Orkneyinga Saga, which records that the mound was broken into by Norse crusaders in winter 1153 (Card 2005c). They left their own records in the form of extensive runic graffiti (see below). In the 1650s, it was apparently dug into by Cromwellian soldiers (Hibbert 1823). Both of these incursions recorded finding an empty building and indicate, as suggested by the runic inscriptions, that any contents (the ‘treasure’) the tomb may have once held had been removed by earlier visitors.

The prominent mound (Figure 32) appears on several early maps and plans of the Stenness area but Maeshowe was not accurately described until 1852, when F.W.L. Thomas published his 1849 topographic survey of the Stenness-Brodgar peninsula and included an elevation of the mound (F.W.L. Thomas 1852).

Antiquarian investigations

Less than a decade after Thomas’s survey, in July 1861, James Farrer ‘opened’ Maeshowe. The excavation was undertaken by a group of local workmen under the audience of a selected group of prominent people, including George Petrie and John Stuart (Davidson and Henshall 1989, 142). When the rubble and soil debris filling the interior had been removed by the workmen, the remarkable nature of the interior and its masonry emerged. So did the surprising discovery of a large number of runic inscriptions on the interior walls and the realisation that Farrer and his men were not the first to explore the mound.

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**Figure 32. The mound of Maeshowe, from the southeast. Image © Daniel Lee.**
Figure 33. “After a few days’ labour the whole of the rubbish filling the chamber was removed, but long ere this was accomplished, the keen eye of Mr. Joseph Robertson discovered the first of the Runic inscriptions” (Farrer 1862, 14). The interior of Maeshowe, drawn by Gibb in 1861 (published in Farrer 1862, Plate 2). Available under open licence through Project Gutenberg.
A few days later an anonymous article appeared in The Orcadian newspaper reporting on the discovery of the runic carvings; this was followed a few days later by another anonymous text and a longer article by Petrie (1861) which contained a detailed description of the chamber and its contents, including his interpretation that the structure itself was considerably older than the Norse carvings within it. Soon after his excavation, Farrer commissioned A.W. Gibb to draw the interior stonework and carvings (Figures 33 and 39). He sent copies of Gibb’s depictions to the renowned runic scholars Professors Rafn, Munch and Stephens with the aim of receiving a range of possible interpretations. These formed the basis of Farrer’s 1862 Notice of Runic Inscriptions During Recent Excavations in the Orkneys. Other early accounts of the runes include those of Stuart (1864) and Charlton (1865).

Early suggestions that the structure contained two female mummies and the ‘skeleton of a gentleman ten feet long’ appeared to be fanciful (Barnes 1994, 21). A small fragment of human skull, apparently of ‘unusual thickness’, and several horse teeth and bones were found within the rubble cleared by Farrer’s men (Petrie 1861) but their current whereabouts is unknown and no other artefacts were recorded during these excavations. Soon after the initial opening, the landowner, Balfour, gave instructions to secure the structure ‘as far as possible against dilapidation’ (op. cit., 358). In 1866, during his second visit to Maeshowe to inspect the runes, Ralph Carr noted that there was still an aperture in the roof of the tomb, and the walls were ‘streaming with moisture’ (Carr 1871, 140). The mason’s mark of 1865 on the south buttress (Figure 30) references consolidation work undertaken at this time, but it is not clear what this entailed. The site was included in the 1882 Schedule of the Ancient Monuments Protection Act and passed into State Care in 1910.

Gordon Childe

Nearly a hundred years after Farrer had opened it in 1954-1955, Gordon Childe undertook the first systematic excavations at Maeshowe on behalf of the Ministry of Works (Childe 1956). He investigated the walling, platform and bank and ditch, revealing the mound to comprise rubble faced by a series of low, concentric revetment walls with impressive masonry. The outer casing comprised clay and stone, but at the base of the wall-face, Childe exposed a layer of turves overlain by a casing comprised clay and stone, but at the base of the revetment walls with impressive masonry. The outer walling, comprising a series of low, concentric platforms and banks, revealed the mound to be a natural glacial mound. The ditch had been excavated at the east and south sides but on its northwest side, the low-lying land meant that only minimal landscaping had taken place to create the platform (op. cit., 38) and the ditched appearance was created by the bank and platform. Renfrew obtained a radiocarbon date for peat that accumulated in the ditch of c. 2,700 cal. BC, indicating a possible terminus ante quem for the construction of the monument (ibid.). He also discovered that the bank encircling the outer ditch at Maeshowe was reconstructed in the 10th century AD (op. cit., 37). Like Childe, Renfrew was primarily concerned with the construction of the platform; he did not investigate the interior of the monument.

Colin Renfrew

Twenty years after Childe, in 1973–4, Colin Renfrew produced the first accurate survey of the mound, and excavated two trenches across the encircling bank and ditch (Renfrew 1979). He discovered that the appearance of an encircling ditch was a topographic illusion due to the exploitation of an apparently natural glacial mound. The ditch had been excavated at the east and south sides but on its northwest side, the low-lying land meant that only minimal landscaping had taken place to create the platform (op. cit., 38) and the ditched appearance was created by the bank and platform. Renfrew obtained a radiocarbon date for peat that accumulated in the ditch of c. 2,700 cal. BC, indicating a possible terminus ante quem for the construction of the monument (ibid.). He also discovered that the bank encircling the outer ditch at Maeshowe was reconstructed in the 10th century AD (op. cit., 37). Like Childe, Renfrew was primarily concerned with the construction of the platform; he did not investigate the interior of the monument.

Colin Richards

In the summer of 1991, during the final season of work at Barnhouse, Colin Richards opened four trenches at Maeshowe: on the platform by the entrance; two on the platform at the rear of the tomb; and one across the outer bank (Challands et al. 2005, 232). The excavations at the front of the mound revealed a stone-lined drain that was sealed, and apparently disabled by the clay platform upon which the tomb is built. On the basis of this stratigraphic evidence, Richards interpreted the drain as part of an earlier structure - more specifically, an earlier Neolithic house - underlying the tomb (op. cit., 247). The same phase of fieldwork led to the discovery of a large cut feature on the platform to the north of Maeshowe which Richards interpreted as a standing stone socket, although the packing stones were intact, the stone had been removed in antiquity (op. cit., 242). It is possible that the tomb was once encircled by a stone circle, or was accompanied by a single standing stone, as suggested for the comparable tomb at Howe (Ballin Smith 1994, 10). This discovery is particularly significant given the extensive use of monoliths in the interior of Maeshowe (Garrow et al. 2005, 251). The examination of the bank complemented Childe’s and Renfrew’s earlier work and revealed that it had started life as a substantial 2m-thick wall, which subsequently collapsed. The rubble from this collapse ran into the ditch where it was partly sealed by Bronze Age silts and peat (Challands et al. 2005, 234). As Renfrew had earlier suggested (Renfrew 1979, 37), this ruined feature was then augmented in the early historic period to create the banked appearance visible today (Challands et al. 2005, 234).
Non-intrusive surveys and monitoring, 1980s-present

Apart from the fieldwork detailed above, Maeshowe has been subject to a number of non-intrusive surveys. Most of these have concentrated upon the runic inscriptions which have been dated to 1125-1175 AD and form the greatest collection outside of Scandinavia (Grieve with Gibson 2005, 71). Since Farrer’s initial publication, the runes had been the subject of a number of detailed readings and interpretations, but it was not until the late 1980s and the research of Michael Barnes, Professor of Scandinavian Studies at UCL, that a full analysis of the inscriptions was undertaken (Barnes 1994). Around the same time, Patrick Ashmore reinterpreted one of the markings recorded by Farrer (his No. XXXI) as Neolithic on the basis of its similarity to carvings seen on the Brodgar Stone and at Skara Brae (Ashmore 1986). Subsequent survey by Richard Bradley and others identified further examples of likely Neolithic carvings (Bradley et al. 1999; 2000), and also undertook the first considered assessment of the stone dressing in the tomb (Phillips and Bradley 2000). These studies have proved useful starting points for my survey and are discussed in more detail below.

Both the exterior and interior of the monument are subject to a periodic detailed conservation and laser scanning survey programme by Historic Environment Scotland, including as part of the Scottish Ten project in 2010 (www.scottishten.org). These works are explicitly conservation-led, aiming to produce a record of the current state of the stonework and its inscriptions rather than identify unrecorded examples. As such, only areas with known carvings are regularly laser scanned and there are no plans to undertake further survey at Maeshowe beyond that required for conservation and monitoring purposes (Stephen Watt, pers. comm.). As a result, although Maeshowe has been the focus of research and investigation for 150 years, much remains unknown about the site. In addition, there are gaps, errors and omissions in the data which compromise detailed interpretations.

MAESHOWE: SITE AND MONUMENT

The passage grave of Maeshowe sits within a massive turf-covered, clay and stone mound c. 25m in diameter and 7m high, with an inner core of concentric stone walls encasing and supporting the central stone-built structure (Childe 1956). Uniquely for a chambered cairn, it sits on an artificial clay platform encircled by the ‘henge-like configuration’ of a bank and a ditch, but without an identifiable causeway (Challands et al. 2005, 229). The main chamber is just over 4.5m² and contains three side cells entered above ground-level, giving the structure a cruciform layout similar to that seen in other passage graves including Newgrange and Barclediad y Gawres (Chapter 2). The chamber is entered via a passage, now some 12m in length, the outermost section of which has been partly restored (RCAHMS 1946b, 307). A recess in the passage houses a blocking stone, which does not quite fill the passage and leaves a small horizontal slit giving a light-box effect similar to that at Newgrange (Ritchie 1996). As noted above, this works with the passage’s northeast-southwest orientation to allow the setting midwinter sun to pass into the chamber, where it hits the rear (northeast) wall. Despite the significance of Maeshowe’s orientation, however, the site is frequently erroneously illustrated as aligning to the primary cardinal axes of north, east, south and west (e.g. Ashmore 1986; Phillips and Bradley 2000).

The internal masonry

Maeshowe is built from stones of the size and shape of standing stones throughout. In each corner is a massive buttress each containing a further standing stone (Figure 34). Although frequently cited as designed to help support the corbelled roof (e.g. Henshall 1985, 98; Ritchie 1996), this is erroneous. These primary elements in the tomb’s

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1 It is beyond the remit of this thesis to discuss the history of research into the runic inscriptions; for a full bibliography see Barnes 1994.
2 District Architect, Historic Environment Scotland

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Figure 34. Detail of Maeshowe’s internal masonry. Eastern buttress looking east (left), and northeast (right). Image © Antonia Thomas.
construction are a non-functional but no less fundamental part of the tomb (Challands et al. 2005, 245). The huge upright stones in the central chamber at Maeshowe are reminiscent of those in the Stones of Stenness and may have transferred the symbolism of the megaliths from the standing stones outside to the inside of the tomb (ibid.). Although with notable exceptions (Challands et al. 2005; Richards et al. 2013), the significance of this fact is rarely discussed. Relatively little analysis has been undertaken on the actual interior of the building or how it was constructed (although see Richards et al. 2013), but as the Royal Commission enthused in the 1920s, ‘…the transport of such large blocks to the building site is … a matter of wonder, and this wonder grows as the masonry is closely examined’ (RCAHMS 1946b, 309).

Colin Richards has noted the similarities in the lithology of some of the Maeshowe stones, with stone from the Staneyhill quarry, c. 4km to the northeast (Richards et al. 2013, 124). The quarry produces thick, wedge-shaped blocks of fine-grained, creamy yellow sandstone with a joint spacing and angle of fracture comparable to that in Maeshowe; in Orkney, only Structure 12 at the Ness of Brodgar is equivalent in terms of its masonry. Other aspects to Maeshowe’s masonry also merit further consideration and these are discussed below.

Stone dressing

That much of the internal stonework in Maeshowe had been dressed ‘by pick and chisel’ (RCAHMS 1946b, 309), has long been recognised and it is frequently mentioned as a particular characteristic of the monument (Davidson and Henshall 1989, 142; Eogan 1992, 124; Shee Twohig 1997, 383). It has generally been interpreted as a fine architectural finishing touch, executed in order to make the surfaces of the stones flush (Davidson and Henshall 1989, 145). George Eogan, however, highlighted the very specific nature of the dressing at Maeshowe, drawing comparisons with the ‘close’ diffuse picking at Dowth, Knowth and Newgrange (Eogan 1992, 124). Although he noted the use of dressing as an architectural device in some areas, such as the bevelling of corbels, he made the crucial observation that the picking is predominantly located in key positions, such as thresholds, and cannot be explained in purely functional terms (ibid.).

In the late 1990s, and at Eogan’s suggestion, Tim Phillips and Richard Bradley undertook a survey in Maeshowe with the specific aim of recording the pick-dressing and chiselling in the interior (Phillips and Bradley 2000). Their work confirmed Eogan’s observations of concentrations at thresholds and other key locations in the tomb. It also provided an important record of the dressing in the tomb, but was limited in other regards. Despite noting that the south (i.e. southeast) side, which is on the right upon entering, bears the least amount of pick-dressing (Phillips and Bradley 2000, 103), they surmised that there is a right-sided emphasis to the working (op. cit., 107). They suggest that the pick-dressing was an intentional texture and finish, that was ‘meant to be seen, and perhaps even felt, in the act of moving through different parts of the monument’ (op. cit., 108), yet conclude that the stonework may have been dressed to allow the adhesion of plaster, which seems unlikely given the frequent superimposition of chiselling in these areas (op. cit., 109; Figure 35).

Perhaps most significantly, their study was not able to examine when in the construction and use of the building the stones were actually dressed. Yet even a cursory examination of the masonry shows that some stones were dressed after being laid, whereas other ones must have been worked before or during construction. Several stones have more than one phase of pick-dressing, and in some cases this is overlain by chiselling. The stones have clearly been subjected to multiple phases of attention, and this observation raises an important issue. If the masonry was not worked and decorated at the same time, how can we interpret it on the basis of its current state, when this is an accumulation of different times, and...
different sequences of attention? This issue of duration will be discussed in more detail below.

**Norse inscriptions**

There are some 33 runic inscriptions inside Maeshowe, which along with the much-famed figurative carvings within the tomb, such as the ‘dragon’ (Figure 38), the ‘serpent knot’, the ‘seal’ and slavering dog, have been assigned a 12th-century date (RCAHMS 1946b, 313). These are distributed throughout the tomb, apart from the interior of the cells, but are concentrated on the southwest and southeast elevations (Figure 36).

The Norse carvings are comprehensively detailed in Barnes 1994 publication *The Runic Inscriptions of Maeshowe, Orkney* which has provided an essential means of cross-referencing possible Neolithic markings recorded during my survey. In addition to cataloguing the runic inscriptions, Barnes identified several markings which he interpreted as unlikely to be Norse. Through a process of detailed photographic survey and by comparing some of these with Neolithic carvings from secure contexts at the Ness of Brodgar, some of these can now be tentatively interpreted as Neolithic (see below).

**Neolithic carvings**

In the late 1980s, Patrick Ashmore made the startling observation that some of the markings inside Maeshowe, which had been dismissed by Rafn, Munch and Stephens as ‘unimportant’ scratches (Farrer 1862, side note to Plate XII; see Figure 39), might be Neolithic (Ashmore 1986). In particular, he noted the similarity between Farrer’s No. XXXI, on the broad face of the orthostat in the south buttress, and part of the incised design on the

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**Figure 36. Distribution of previously recorded Norse runic inscriptions and contemporary figurative carvings in Maeshowe. Arabic numerals follow the numbering of Barnes (1994); Roman numerals follow that of Farrer (1862). Areas discussed by me are shown in Figure 41. Image © Antonia Thomas, after Farrer 1862 and Barnes 1994.**
slab found at Skara Brae in 1972, the Brodgar Stone, and a portable object from Skaill (op. cit., 58-59). He also noticed a partial circle to the right of, and an inverted V above, Farrer XXXI (his no. 33 and no. 34 respectively; op. cit., 62). Ashmore additionally detailed a mason’s mark with the date 1865 (his no. 35) and a carving which appeared to underlie the runic inscription on the edge of the western orthostat, his no. 36 (Ashmore 1986, 62).

In 1999, following on from their discovery of incised motifs in the Quoyness and Cuween tombs (Bradley et al. 1999), a team led by Richard Bradley examined Maeshowe for comparable designs. Although their survey was incomplete in some respects (they were not able to examine the side cells, for example), it was a ground-breaking study and recorded eleven distinct areas of incised decoration within Maeshowe: two in the entrances to the side cells, one in the passage and eight within the central chamber (Bradley et al. 2000, 57). They found that the thresholds, and in particular the entrance to the central chamber, formed foci for decoration, and, in line with both Richards’ earlier analysis of incised motifs at Skara Brae (Richards 1991) and evidence from Irish passage-graves (Herity 1974, 123), a distinctive right-hand emphasis to the incised markings. This was demonstrated through the greater number of carvings,
Figure 39. “The remaining Nos. are considered by all the learned Professors as “scribbles” or scratches, and must be considered as unimportant” (Farrer 1862, Side note, Plate XIII). The ‘unimportant’ carvings in Maeshowe (published in Farrer 1862, Plate 13). Available under open licence through Project Gutenberg.
the higher levels of skill in their execution, and the more numerous range of heights above floor level at which they were found (Bradley et al. 2000, 60).

Bradley’s team interpreted Ashmore’s nos. 33, 34 and 36 as Neolithic. Ashmore additionally recorded two further areas of ‘miscellaneous scratchings’ (his numbers 37 and 38), which were not examined by Bradley et al. These relate to my MH14_22/MH14_23 and MH14_20 respectively (see below).

Dating and chronology

No dating evidence that relates to the construction of the Maeshowe itself has ever been recovered. Stuart Piggott believed Maeshowe to be the ‘archetype’ from which other chambered tombs in Orkney developed (1954, 244), suggesting its construction reasonably early on in the Neolithic. Eogan agreed on the basis of morphological similarity ‘to its presumed Boyne prototypes’ (1992, 126). Renfrew and others instead saw Maeshowe as the ‘final achievement’ (Davidson and Henshall 1989, 90) of the Neolithic passage grave tradition, and suggested construction c. 2700BC (Renfrew 1979, 31). Although unproven, this date is still generally followed (e.g. Towers et al. 2015, 3). The striking similarity between the masonry in Maeshowe and the Ness of Brodgar, particularly Structure 12, certainly suggests that the two are broadly contemporary; this will be discussed further in Chapter 6.

SURVEY WORK 2012-2014

Following the discovery in 2009 of pick-dressed stone from Structure 10 at the Ness of Brodgar, I revisited Maeshowe to examine the comparable, and well-documented examples in the tomb. This initial visual inspection of the tomb interior revealed several unrecorded areas of carving and stoneworking. Over the next few years, it became clear that the Ness of Brodgar had a diversity of Neolithic stoneworking and decoration that seemed not to be paralleled at Maeshowe, despite the commonalities between the two sites. This factor, coupled with the gaps in knowledge detailed above, made detailed survey and re-assessment of the interior stonework of Maeshowe both timely and essential.

Recording methodology

Survey work was undertaken during several visits in 2012-2014. Although access was restricted to supervised hourly slots between 9-10am during winter opening

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FIGURE 40. RUNIC INSCRIPTIONS OVERLAVING PICK-DRESSING ON THE NW ELEVATION. OTHER MARKINGS IN THE TOMB ARE LESS EASILY DATEABLE. IMAGE © ANTONIA THOMAS.
hours, I surveyed all visible areas of the monument up to a height of 3.6m above the floor, at which point work was not safely possible. Areas with previously identified markings, including those interpreted as Norse or later, were examined and reassessed; in one case (MH14_04), this allowed a design which had been thought to be Norse to be reinterpreted as Neolithic.

Some of the carvings in Maeshowe had been numbered several times. Barnes (1994) revised Farrer’s (1862) allocation of numbers in his analysis of the runic carvings, and Bradley et al. (2000) used a sequence of numbers that started at 12 for Maeshowe, as it followed on from numbers issued at Cuween, Holm of Papa Westray South, Quoyness and Wideford. I have renumbered all non-runic carvings and prefixed them with MH14 to distinguish them from previous records. Purely runic inscriptions are referred to using Barnes’ (1994) numbering system. Additional survey took place with Hugo Anderson-Whymark, Nick Card and Roy Loveday in 2013-14 with the specific aim of recording chiselling (Loveday et al. in prep). Areas of pick-dressing are not individually numbered but are shown on the elevations and discussed below.

Survey results

Thirty-five areas of incised markings were recorded during my survey and are discussed below: this includes some markings previously identified by Ashmore (1986), Barnes (1994) and Bradley et al. (2000), but does not include markings which are solely runic or obviously Norse. Individual scratches were not recorded unless they were clearly part of a more coherent design. The position of these 35 areas is marked on Figures 41-51.

Carvings recorded in my survey

- 15 = ?Neolithic
- 16 = ?Norse
- 32 = post-1861 / unknown

Figure 41. Plan of Maeshowe showing the carvings recorded during my survey. This includes all of the areas noted by Ashmore (1986) and Bradley et al. (2000) but only some of the areas noted by Barnes (1994). All of the Norse inscriptions are shown in Figure 36. Image © Antonia Thomas.
Figure 42. Southwest internal elevation, showing pick-dressing and incised motifs discussed in the text. For detail of boxes see Figure 43. Image © Antonia Thomas, based on survey data kindly provided by Historic Environment Scotland.
(a): ?Norse

On 02 and 04, areas interpreted as Neolithic are shown in half-tone

(b): ?Neolithic

= pick-dressing

Figure 43. Southwest internal elevation. Detail of incised markings. Image © Antonia Thomas.
Figure 44. NORTHWEST INTERNAL ELEVATION, SHOWING PICK-DRESSING AND INCISED MOTIFS DISCUSSED IN THE TEXT. FOR DETAIL OF BOXES SEE FIGURE 45.

IMAGE © ANTONIA THOMAS, BASED ON SURVEY DATA KINDLY PROVIDED BY HISTORIC ENVIRONMENT SCOTLAND.
I include several markings that are clearly not prehistoric, for example the 1865 mason’s mark on the southern buttress; carvings MH14_02 and MH14_05, which are likely to be Norse; and MH14_09 and MH14_18 which could be recent damage. The remainder are of unknown date, but through comparison with carvings from secure contexts at the Ness of Brodgar and elsewhere in Orkney (Figure 26), can be considered Neolithic. The following section describes the incised markings recorded during my survey. These were numbered in a clockwise direction starting with the passage, then continuing with the southwestern elevation, then moving onto the western buttress, etc. These are presented below.

**The passage**

A kite-like motif (MH14_01) is incised onto the uppermost stone in the coursing to the southwest of the side slab on the northwest (left-hand) side of the passage. This was drawn by Gibb in 1861 (Farrer XXIX; Fig. 4.09), but dismissed as an unimportant ‘scribble’ (Farrer 1862, 40). Although Barnes noted its similarity to a Þ character, he thought it unlikely to be runic (Barnes 1994, 217). It was subsequently recorded by Bradley et al. as a probable Neolithic marking (Bradley et al. 2000, Fig.12.22).

**The southwest elevation (Figures 42, 43)**

Six courses up to the left of the orthostat in the south buttress is a mason’s mark and the date 1865 (MH14_32). This was noted by Ashmore as his no.35 (1986, 62. There are two runic inscriptions on stones high (over 3m) above the passage opening. Barnes’ No.1 (Farrer I) is found on the corbelling and is quite damaged. On the course below, a little to the left, is Barnes’ No.2 (Farrer No.II). Neither of these contain obviously non-Runic characters (Barnes 1994, 62). On a large slab three courses above the opening to the passage are two motifs, (MH14_02; Farrer No.XXVII). These comprise a crude cross, carved with double lines with several further faint vertical lines to the right. To the left of the cross is a motif that has been interpreted as a Þ character (op. cit., 216). Despite the similarity of the left-hand motif to some possible Neolithic designs (e.g. MH14_01), the two motifs appear to be carved with the same tool, so appear to be contemporary and are likely to be Norse or later.

Approximately 1m to the right on the same stone are a series of previously unrecorded very faint vertical and diagonal lines which appear to form a chevron design (MH14_03) which I have interpreted as Neolithic. A
series of incised, mostly vertical lines (MH14_04) on the lintel immediately above the entrance passage were recorded in 1861 by Farrer (No. XXVIII), but dismissed by Barnes as ‘no more than “trial” characters or the results of doodling’ (Barnes 1994, 216). However, there are faint diagonal lines between the first two of the five verticals in the middle of the design depicted in Farrer’s Plate 13. These cross one another to form a faint banded cross-and-lozenge motif, similar to MH14_31 and MH14_33 and also comparable to examples recorded at the Ness of Brodgar. Crucially, the tops of these verticals appear to be overlain by the dressing and these can be tentatively interpreted as Neolithic. The more deeply-carved lines to the right are of unknown date. On the edge of the orthostat forming the southeast side of the passage opening is a carved cross (MH14_05), which is very similar to the double-lined cross of MH14_02. It was not mentioned or illustrated in Farrer 1862 and may be modern graffiti (Barnes 1994, 219).

The edge (northeast face) of the west orthostat carries a long runic inscription (Barnes’ No.4) that runs up the side vertically. This overlies incised markings (MH14_07) that were interpreted by Barnes as an attempt to deface the runes (1994, 71-75, Fig.2). It actually underlies them and was interpreted by Bradley et al. (2000, Fig.6; Fig.11:13) as Neolithic. They noted that some of these lines had been recut, but whilst the primary lines clearly underlie the runic inscriptions, my survey noted the re-cutting as overlying the Norse carvings. This relative phasing is somewhat contradictory, and makes the Neolithic date of the lower half of MH14_07 less certain. The upper half of MH14_07, seems more straightforward; it clearly underlies the runes and is markedly similar to MH14_26 (see below), which also underlies a Norse carving. The coursed stonework in the SW face of this buttress has further runic carvings on four stones. The uppermost of these has a continuation of Barnes’ No.4, which turns to run horizontally; two courses below is Barnes’ No.5. The stone with this latter inscription also shows many casual scratches that are not connected to the runic text, but these were fairly incoherent. Two courses below is a large square block with a runic inscription carved vertically down its left (Barnes’ No.7). To the right are several vertical incised lines, which intersect in places with horizontal and diagonal lines (MH14_08). Approximately 25cm from the left edge of the stone a motif not dissimilar to MH14_01 in the passage can just be seen. These markings have not been discussed before but due to similarities with examples from secure contexts at the Ness of Brodgar (e.g. SF8844, Structure 8) could be Neolithic.

Northwest elevation (Figures 44, 45)

This is the left-hand side elevation on entry stretching between the western and northern buttresses and has several areas which merit discussion. Three stones to the left of the northwest cell have runic inscriptions. The largest, bottommost, of these three is Barnes’ No.9 (Farrer’s VIII). It contains three lines, two in ordinary runic characters and the third in twig runes (Barnes 1994, 95). Barnes records long thin lines descending from each of runes 36 and 37 which appear to predate the Norse inscription, and suggests that these may be ‘ancient marks which were made when the stone was dressed for use in the construction of Maeshowe’ (op. cit., 98). Examination of these was inconclusive. On the stone immediately above Barnes’ No.9 is a further runic inscription. This was recorded by Farrer as No.VII; together with Farrer’s No.VI on the stone above, these two lines of runes form a single inscription and are catalogued as Barnes’ No.8. Within rr.22-5 of this inscription is an area of cross-hatching (MH14_10) which was interpreted by Barnes as an attempt to ‘cross out’ part of the runic inscription (op. cit., 85), but as identified by Bradley et al. (2000, Fig.12:20), it actually underlies the Norse writing and is probably Neolithic.

A deep cut which curves down to the left at the edge of the stone is not thought to be runic (Barnes 1994, 84) but could be of any possible date. The large slab which forms the lintel to the northwest cell, and which runs the length of the elevation contains an area of incised markings (MH14_09) above and to the southwest of the cell opening. Although these appear to be runic, these marks are not illustrated by Gibb (1862) or mentioned in Barnes’ otherwise very thorough survey (1994), so may be more recent in date. On the broad face of the northern orthostat are several intersecting incised lines forming a scalariform pattern (MH14_19). These were not depicted by Gibb in 1861, and could be modern. Nevertheless, they also bear a striking similarity to incised markings noted at the Ness of Brodgar, e.g. SF15124 found between Structures 8 and 12.

The southeast face of the orthostat in the west buttress has several markings, ranging from runes to ‘casual lines, scratches and indentations’(Barnes 1994, 67). Towards the top is a runic inscription which was drawn by Gibb in 1861 and recorded by Farrer as No.X (Barnes’ No.3). There is also a deeply carved cross, a series of individual Rs, and a motif which comprises intersecting lines and chevrons (MH14_06), which was interpreted by Munch as a ‘rude figure of a horse’ (Farrer 1862, 56). A rubbing of this stone made by Magnus Olsen 1911, and a contemporary glass-plate negative in the Norwegian Runic Archives were analysed by Barnes during his research; neither of these showed the additional Rs or the cross, suggesting that they are 20th-century graffiti (Barnes 1994, 70). Due to time constraints during my survey, it was not possible to draw all of the markings on this orthostat; it would benefit from further, detailed examination.

Northwest cell (Figure 46)

The southwest face of the stone forming the right-hand side of the cell entrance has a runic inscription (Farrer’s
No.IX; Barnes’ No.10) near the top of the stone. To the right are scratches unconnected to the Norse inscription. These have several intersecting lines that seem to be the faint remains of a cross-and-lozenge pattern (MH14_11). Although previously interpreted as ‘mere random lines - the results of epigraphic doodling’ (Barnes 1994, 104; Fig.7), the design is similar to examples from the Ness of Brodgar, in particular SF15614 from Structure 7 and SF16413 from Structure 12, and I have interpreted MH14_11 as Neolithic. Towards the bottom right-hand corner is a small area of incised cross-hatching (MH14_12) first identified by Bradley et al. (2000, Fig.12:19) and interpreted as Neolithic. Opposite these, on one of the stones forming the left-hand side of the opening, is MH14_34, which was identified at the end of the survey. It comprises several roughly parallel, slightly arcing vertical lines scratched into the surface of a stone, which is pick-dressed on its left-hand side. Within the cell itself are three further previously unrecorded areas. On the face of the orthostat forming the cell’s northwest side are a range of both arcing and straight intersecting incised lines covering an area of c. 50cm in width (MH14_15). On the top course next to the orthostat is a stone with at least eight vertical parallel strokes running from edge-to-edge on its face (MH14_13). The bottom course contains MH14_14, which comprises four parallel
Figure 47. Northeast internal elevation, showing pick-dressing and incised motifs discussed in the text. For detail of boxes see Figure 48. Image © Antonia Thomas, based on survey data kindly provided by Historic Environment Scotland.
vertical incised lines, the middle two of which have been filled with parallel diagonals, or bends sinister, in a banded design.

Northeast elevation (Figures 47, 48)

On the southwest facing wall of the northern buttress, eight courses up, is a stone with several deep vertical lines cut into its edge. This was depicted by Gibb in 1861 and described by Farrer as his No.XXX, but is not translatable as a runic inscription, and was thought by Barnes to be either an unfinished Norse inscription, or the product of someone whiling ‘away a tedious hour by incising a few verticals for practice’ (Barnes 1994, 218). The carvings are very deep and compare more readily to some of the runic inscriptions than those which are similar to known Neolithic examples, so I am inclined to agree with Barnes here. Four courses below is a small stone with several intersecting incised strokes (MH14_16), and immediately below that, a stone with a crude incised zigzag (MH14_17).

Along the southwest facing edge of the northern orthostat are four runic inscriptions, vertically carved into the stone’s edge: these are Barnes Nos. 11-14 (Farrer No.XIV). Barnes’ No.11 is as described by him
and runic (1994, 105-107), but not all of the incised lines included within No.12 are as clear. Running across the top of r.r.1-7 is a thin scratch, partnered by an arcing line that may underlie the same runes at their bases (ibid.) and would benefit from further examination. Further down the orthostat are Barnes’ No.13 and No.14, which might also be overlain upon earlier incised marks. Barnes describes ‘a crudely drawn cross’ (1994, 111) and two faint vertical lines immediately to the left of r.1 in No.13. Two intersecting lines underlie r.1 and are thought by Barnes to be ‘extraneous to the inscription’ (op. cit., 112). These were not recorded during my survey, but along with faint oblique scratches between r.22 and 23 of No.14 (op. cit., 116), may warrant further investigation. The extensively-chiselled large block at the (right-hand) base of the buttress bears several incised markings, including parallel lines (MH14_35). These appear to underlie the chiselling, and at the right-hand side of the stone, seem to demarcate the area to be chiselled. This use of incised lines to demarcate an area of dressing has been noted in several stones from the Ness of Brodgar (e.g. SF16258, Structure 10), and on the Stonehenge sarsens (Abbott and Anderson-Whymark 2012, 36).

The central elevation between the two buttresses is opposite the entrance and is the first sight upon entry; this is illuminated by the midwinter sunset. It is significant, therefore, that there are several areas of incised marking on this elevation (contra Bradley et al. 2000, 60). The middle of the three stones forming the right-hand side of the opening to the cell contains Barnes’ No.16, which is as described by him and does not appear to contain any markings which could predate the runes. To the right is a concentration of incised markings which may correspond to the ‘miscellaneous scratchings’ noted by Ashmore as his No.37 (1986, 62) and which are spread across three stones to the right of the cell, next to the eastern buttress. The lowest of these (MH14_24) has a series of slightly arcing, intersecting incised lines, giving the impression of loose cross-and-lozenge patterning. The arcing nature of the lines is similar to those on the recently identified stone from Rhu Arisaig, Moidart, which although found within an abandoned post-medieval croft-house, has been tentatively assigned a Neolithic date (Bowker 2014). These also bear a striking similarity to the radiating decoration seen on several stones from the Ness of Brodgar, e.g. SF8844, Structure 8 and SF18324, Structure 12 and I have interpreted these as likely to be Neolithic.

More faint incised lines are visible on the two stones immediately above; these show a series of radiating vertical and diagonal lines (MH14_23) which in places extend over the face of both the stones. With the exception of MH14_27 on the southeast elevation, this is the only instance where incised marks extend between two stones. Several other areas of both incised markings and runic inscriptions on this elevation might be Norse or later. The large block of stone forming the left-hand side of the cell, holds Barnes’ No.15 inscription. Although as a piece of runic text this curious script is ‘without parallel’ (Barnes

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**Figure 49. Detail of incised stones in the northeast cell. Image © Antonia Thomas.**
1994, 118), it is generally accepted as Norse and does not contain anything which appears to be older. Some 5cm beyond r.20 however, Barnes describes a grouping of scratched and more deeply cut lines, including what he suggests might be the Roman letters MD (op. cit., 123). None of these markings were depicted by Gibb in 1861 and they are probably modern.

On the southwest edge of the eastern buttress orthostat there are several markings. The 'walrus', were assigned No.XXXII by Farrer. Although 'there is little here that can be considered runic', the carvings are undoubtedly Norse (Barnes 1994, 218). However, to the left of the walrus, underlying it and between it and the dragon, are a series of other lines which underlie the Norwegian drawings (MH14_26). These were noted by Ashmore as likely to be Neolithic (his no.36: Ashmore 1986, 62); Bradley et al. agreed (2000, Fig.12:16). The intersecting lines are comparable to the upper half of the carvings on the northeast face of the orthostat in the western buttress (MH14_07). Approximately 15cm above MH14_27 is an incised motif (MH14_26) comprising several intersecting lines forming a kite-like motif similar to MH14 01 in the entrance passage. It was noted by Barnes and interpreted by Bradley et al. as Neolithic (2000, Fig.12:17).

Northeast cell (Figure 49)

This cell is illuminated by the midwinter sunset. In its southeast facing (left-hand) side wall is a small incised design (MH14_21) which was recorded by Bradley et al. (2000, Fig. 12:18). Although barely visible, it comprises a series of parallel vertical strokes and a diagonal line, forming a faint banded pattern. A further faint cross-and-lozenge design is scratched into the upper course of stones above the gap in the stonework on the left-hand side of the cell opening (MH14_20). This was not discussed by Bradley et al. but was noted by Ashmore as similar to the design on the south buttress; he thought it might be modern because of the ‘freshness’ of the marks (1986, 62). However, several stones at the Ness of Brodgar exhibit very similar ‘fresh’ scratching (e.g. SF18307 in Structure 1, which was sealed by a blocking wall in the Neolithic) and I have interpreted MH14_20 as Neolithic. A further, ‘new’ design was recorded on the internal face of the lintel above the opening into the cell during my survey and comprises six lightly incised parallel vertical lines (MH14_22).

Southeast elevation (Figures 50, 51)

The broad (northwest) face of the orthostat in the east buttress is in a poor state. The flagstone slab delaminated shortly after Farrer’s excavation in 1861 and several fragments are now held at the NMS in Edinburgh (Barnes 1994, 127.). It was depicted by Gibb prior to its delamination (Farrer 1862, Fig.12) and photographed in 1955 (Barnes 1994, Plate 42). There are several miscellaneous markings and scratches in addition to the runic inscriptions on this slab but it is too damaged to examine in any detail.

The stretch of walling between the east and south buttresses forms the right-hand side of the interior upon entry to Maeshowe. It has the highest concentration of runic inscriptions in the tomb. Directly above the entrance to the southeast cell, four courses up, is Barnes No.18 (Farrer XV). Although there are several scratches and markings visible which are distinct from the runic text, none of these are coherent enough to be dateable on the basis of motif. To the right of the uppermost of the two lengths of runes forming Barnes’ No.20 are a series of oblique incised lines and loose cross-hatching (MH14_28; see Figure 52), which have no connection with the inscription (Barnes 1994, 152). This was recorded by Bradley et al. (2000, Fig.12:14) as likely to be Neolithic. Immediately below and to the left of the lintel above the SE cell is Barnes’ No.19 (Farrer XVII), which is two courses above the lower of No.20’s two stones. To the left are a series of scratches, spanning two stones, which are not connected to the runic inscription. These marks (MH14_27) were identified by Bradley et al. (2000, Fig.12:15) as likely to be Neolithic.

On the lower of the stones forming the right-hand side (southwest) of the side cell are a series of runic inscriptions, numbered XIX and XX by Farrer (1862, 35-7) but divided by Barnes into ten separate entities (1994, 170). He noted various lines and scratches before and amongst these runes which are not connected to the inscription (Barnes 1994, 180-210). Although Barnes believes some of these were part of a ‘putative attempt at defacement’ (op. cit., 188), they clearly pre-date the runes and are potentially Neolithic carvings (MH14_29), as they include faint traces of zigzags and radiating lines similar to the incised marks seen on MH14_24 and examples from the Ness of Brodgar, e.g. SF18324, Structure 12.

On the large slab forming the base of the side cell is a small area of previously unrecorded incised markings consisting of a series of intersecting arcs (MH14_30). Three courses below is one of the finest motifs identified in the tomb (MH14_31), a banded cross-and-lozenge design immediately comparable to examples from the Ness of Brodgar, including the Brodgar Stone, and undoubtedly Neolithic. It was recorded by Bradley et al. (2000, Fig.12:21). The southwest face of the stone on the left-hand (northeast) side of the cell has two runic inscriptions (Barnes No. 21 and 22). No markings were recorded inside the cell and it currently provides a storage place for computer equipment used by Historic Environment Scotland.
Figure 50. Northeast internal elevation, showing pick-dressing and incised motifs discussed in the text. For detail of boxes see Figure 51.

Image © Antonia Thomas, based on survey data kindly provided by Historic Environment Scotland.
The orthostat in the south buttress - the right-hand orthostat upon entry - has many overlapping scratches and deeper incised markings across its face. Given the difficulty in disentangling the different markings on this face, I have followed Bradley et al. (2000) and grouped them together as MH14_33. Amongst these is the cross-and-lozenge motif which was numbered by Farrer as No.XXI and subsequently interpreted by Ashmore as Neolithic (Ashmore 1986, 58-59). Several similar examples have since been found at the Ness of Brodgar. During their survey, they took infra-red photographs of a number of decorated surfaces in the tomb and noted the possible use of pigment in association with the semi-circular motif (op. cit., 54).4

In July 2014, during a visit to Maeshowe with Professors Mimi Bueno Ramirez and Rodrigo de Balbin Behrmann of the University of Alcala, we discussed the potential for the use of pigment in the tomb. They were unsure of the presence of pigment on the area on the south orthostat, but thought that several other areas of stonework had potential for further analysis.

4 In July 2014, during a visit to Maeshowe with Professors Mimi Bueno Ramirez and Rodrigo de Balbin Behrmann of the University of Alcala, we discussed the potential for the use of pigment in the tomb. They were unsure of the presence of pigment on the area on the south orthostat, but thought that several other areas of stonework had potential for further analysis.

DISCUSSION: ART AND ARCHITECTURE AT MAESHOWE

Due to time constraints, my survey in Maeshowe was relatively limited and cannot be considered exhaustive. Nevertheless, I noted several previously-unrecorded incised motifs and other forms of stoneworking and decoration throughout the interior.

However, Maeshowe has a complicated biography. I noted many carvings during my survey, but how can these be interpreted, when arguably they could be graffiti5 from any period? We do not know, for example, if the passage was blocked in the Neolithic, or if it remained open. Frequent Iron Age activity at Neolithic sites in the Stenness-Brodgar area (Card 2005b, 65)

5 Interestingly, the first use of the word graffiti in English was in reference to the runic inscriptions in Maeshowe: ‘They are mere wall-scratchings by different hands, and must be treated as Norse equivalents of the old graffiti of Pompeii’ (Daniel Wilson, in Vol. 2 of The Prehistoric Annals of Scotland, 1863, page 287).
The passage may have also been accessible in the Norse period. Runic inscription No.9 (‘many a woman has gone stooping in here’: Barnes 1994, 99) is frequently interpreted to imply sexual submission (op. cit., 102.), but could literally imply stooped entry through the passage. Other reports note Cromwellian soldiers digging into the mound in the 17th century (Hibbert 1823); it is unlikely that these accounts record the only unofficial visitors to the tomb. And, of course, Maeshowe has been accessible since Farrer’s excavations. Although entry to the tomb has been controlled since the 1930s, at the beginning of WWII, a group of Royal Engineers forced their way in to the tomb and may have been responsible for some of the marks not depicted by Gibb (Barnes 1994, 70).

Maeshowe has certainly played host to many visitors in its 5,000-year history, and arguably, any of these could be responsible for marking the tomb’s walls. Nevertheless, there are several indications of relative chronology. Some of the ‘new’ incised marks (e.g. MH14_29), clearly underlie the Norse graffiti, makes it possible that Maeshowe was entered at this time. The bank around Maeshowe’s mound was refurbished during the 10th century AD (Renfrew 1979, 37) and this attention may have extended to the interior.
Incised stonework

With the exception of the interior of the southeast cell, incised markings were recorded throughout: in the main chamber, in the passage and in the northwest and northeast cells (Figure 41). Although they were identified at heights ranging from 10cm above the floor level (MH14_31) to just above 2m (MH14_25), as previously noted, the majority of carvings occur within ‘a compact zone between the level of the cells and the eye level of an adult’ (Bradley et al. 2000, 57; see Figure 53). Many of the carvings were in prominent locations such as thresholds, but there are also many tucked into discreet corners, or awkwardly placed at the edge of stones. Even in conspicuous positions, the incisions are lightly scratched and barely visible without artificial lighting, perhaps suggesting that their visual appreciation was not a primary – or consistent - concern. Given the apparent importance of ‘dexter over sinister’ (Herity 1974, 123; Richards 1991; Bradley et al. 2000, 60) in Neolithic architecture, it is notable that the southeast (i.e. right-
hand) cell appears not to contain any carvings, whilst the northwest (i.e. left-hand) cell has several. The incised motifs appear in clusters, a phenomenon also observed at Skara Brae and at the Ness of Brodgar.

The size of the incised marks vary in response to the size of the stones; overall the Neolithic inscriptions range in size from c.4cm in width (MH14_01), to c.40cm (MH14_08). Several designs include intersecting lines and lattices and there are also several curvilinear motifs (Figure 54). Although these are unusual in an Orcadian context, they do find parallels with several examples from the Ness of Brodgar. The commonest design in the incised markings, however, is parallel lines, either left empty (possibly representing a first stage in a design), or filled with cross-and-lozenge, parallel diagonal lines (equivalent to heraldic ‘bends’) or chevron patterns (Figure 55). These compare well to many of the incised examples found at the Ness of Brodgar. Other markings can be interpreted as Neolithic, but are not necessarily ‘decorative’. The incised lines of MH14_35, for example, appear to delimit areas of chiselling, rather than a design in their own right (see below).

There may be some correspondence between different areas of the interior and the way in which the stones are marked, indicated by the similarity between the designs of MH14_26 and the upper half of MH14_07, in comparable positions on the long edge of the east and west orthostats, which both face into the central space. Whilst this observation might suggest that the visual form that the motifs take is significant, in other cases the opposite is true. The stones are generally very lightly scratched, with the Neolithic motifs readily distinguished from the Norse inscriptions, which tend to be more heavily executed. As other researchers have noted (Challands et al. 2005, 245), a striking characteristic of the carvings is their faintness. The visibility of the decoration is thus in stark contrast to the scale of the architecture at Maeshowe, a paradox which is difficult to explain by reference to the carvings’ final visual appearance, form and style.

In other cases, marks may have been partly obliterated by later working. The top ends of the vertical strokes of MH14_04 (Figure 42), the incised banded cross-and-lozenge motif on the lintel above the entrance in the southwest elevation, appear to be overlain by the pick-dressing along the upper edge of stone; in places the faint vestiges of these lines can just be seen underneath the picking. It seems likely that this dressing took place during or after the lintel was laid, as a ‘finishing touch’, but at this point, the incised design was already on the face of the stone.

There are several possible explanations for this: the stone was re-used; or it was incised and then pick-dressed almost immediately afterwards; the stone was incised before it was placed in position; or that pick-dressing occurred some time after the first stages of stoneworking in the tomb. Regardless, it suggests that any meaning the incised motifs had was not static, and that its appearance (i.e. the ability to ‘read’ it) did not remain important.

There are thus sequences of attention which highlight the need to consider the longer duration of appreciation that the building may have seen within the Neolithic, and how various aspects of stoneworking and decoration related to different stages of Maeshowe’s construction. There are additional indications of relative phasing. In two cases (MH14_23 and MH14_27), incised motifs extend over two stones, suggesting that the marking took place after the stones were laid. In other cases, the stratigraphic relationship between incising and other forms of stoneworking and decoration can also be identified.

**Polishing**

The faces of several stones, including the door jambs, have a polish which appears to be deliberate. A similar treatment was recorded at Newgrange but dismissed by Shee Twohig as due to modern visitors (1981, 118). However, polishing has been recorded on several stones from the Ness of Brodgar (e.g. SF3010, Structure 10 and, SF3585, Structure 8; See Chapter 7) and it seems likely that this was an intentional Neolithic surface effect. Polishing may have served to prepare stones for the application of pigment (Mimi Bueno pers. comm.), but should be considered a form of attention in its own right. Polishing enhances not only the richness of the stone’s natural colour, but also the contrast between any overlying incised lines and the surface of the stone. The effect is therefore similar to that conjectured for the application of paint prior to incising (Bradley et al. 2000, 54). In contrast to the Ness of Brodgar, where polishing is sometimes seen to post-date pick-dressing (e.g. SF16258, Structure 10), at Maeshowe, no pick-dressed surfaces appeared to be subsequently polished and in several cases (including the door jambs) the polished face (and any incised lines which may have once existed) is partly obliterated by pick-dressing.

**Pick-dressing**

In contrast to the often barely visible incised markings, pick-dressing is prominent and visible: it seems that it was meant to be seen. It is found throughout the passage, main chamber and side cells, although the densest concentration is found in the southwest and northwest elevations (Figures 42, 44). The most extensive dressing can be seen on the right-hand (southwest) stone forming the opening to the southeast cell, which has two stages of pick-dressing overlain by chiselling (Loveday et al. 2012; Figure 35 above).
Both of the uprights forming the door jambs in the southwest elevation have been partially pick-dressed, and the inner lintel shows particularly fine and symmetrical working which may be considered decorative (Figures 42, 56). In 2014, a stone was found in Structure 10 at the Ness of Brodgar with a very similar area of pick-dressing (SF18934). It is important to note that certain areas of dressing appear to have been executed at different times in the construction and use of Maeshowe: it is not a unitary phenomenon. In the left-hand side of the
Figure 56. The inner lintel of the entrance passage, showing pick-dressing. Image © Antonia Thomas.

Figure 57. Discrete sub-circular area of pick-dressing on the southeastern side of the passage. Image © Antonia Thomas.
northeast elevation (Figure 47), the face of a stone three courses from the floor has been entirely pick-dressed to its edges. The lateral space needed for this working means that this would not have been possible after construction. It may have been re-used from another site, or dressed before or during the build. Each of the three blocking stones to the side cells within the chamber, and the large blocking stone in the entrance passage, have signs of pick-dressing; in these cases, it is conceivable that the dressing was executed in order to make the stones flush with their respective openings. Some stones were dressed to fit as snugly as possible with their neighbour (Figure 34), working which must have taken place at the time of construction.

Several of the corbels on the southwest and northwest elevations (Figures 44, 46) have been dressed along the entirety of their faces and it seems likely that this would have occurred during or after the construction of the monument, as a final ‘finishing touch’ (see discussion of this in relation to the Ness of Brodgar in Chapter 6).

As described above, the pick-dressing on the lintel on the southwest elevation overlies the incised markings of MH14.04. This is particularly interesting when seen in the context of comparable examples from the Boyne Valley. At both Newgrange and Knowth, pick-dressing often overlies and obliterates earlier incised designs (Eogan 1997, 140). A similar possibility is hinted at by a previously unrecorded discrete area of pick-dressing observed on one of the large stones on the right-hand side on entering the passage (Figure 56). Whilst its position in the entrance could suggest that it is a ‘finishing touch’ (see discussion of this in relation to the Ness of Brodgar in Chapter 6). It may have been re-used from another site, or dressed before or during the build. Each of the three blocking stones to the side cells within the chamber, and the large blocking stone in the entrance passage, have signs of pick-dressing; in these cases, it is conceivable that the dressing was executed in order to make the stones flush with their respective openings. Some stones were dressed to fit as snugly as possible with their neighbour (Figure 34), working which must have taken place at the time of construction.

To SF16138, Structure 8, Ness of Brodgar); however, it is a piece of decoration in its own right (as such comparable discrete sub-circular shape. This could be interpreted as a means that this would not have been possible after construction. It may have been re-used from another site, or dressed before or during the build. Each of the three blocking stones to the side cells within the chamber, and the large blocking stone in the entrance passage, have signs of pick-dressing; in these cases, it is conceivable that the dressing was executed in order to make the stones flush with their respective openings. Some stones were dressed to fit as snugly as possible with their neighbour (Figure 34), working which must have taken place at the time of construction.

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Chiselling

Until recently, the chiselling in Maeshowe had been largely undiscussed (although, see Phillips and Bradley 2000). It has only been recorded at Maeshowe and the Ness of Brodgar. Between 2012-2014, additional survey work was undertaken in Maeshowe by the author and others (Loveday et al. 2012) to investigate the chiselling. This work is ongoing (Loveday et al. in prep.) and has revealed some interesting characteristics to the working. In the southwest face of the north buttress, an area of chiselling appears to have been executed from left to right, starting about 15cm right of the chamber wall and rising at an angle of some 20° from the horizontal (Loveday et al. 2012, 6). This is difficult to carry out in situ, as chiselling requires considerable lateral space and at this low level (c. 0.5m), lends itself to a falling rather than a rising course (ibid.). It is significant that in each case where chiselling has been noted, it overlies pick-dressing; a characteristic which is paralleled in the Ness of Brodgar examples (Chapter 6). It seems likely therefore that chiselling occurred at a relatively late stage. Despite suggestions that this may have been executed using a copper tool (Roy Loveday pers. comm), Hugo Anderson-Whymark successful replicated the working using a simple flint flake (Loveday et al. 2012, 6).

Pecked recesses and notches

In the southwest, northwest and northeast elevations, sub-rectangular or semi-circular recesses are peeked into the large slabs (Figures 59-61 and individual elevations). During my fieldwork, none of the guides were able to explain these features and they are not mentioned in previous accounts of Maeshowe. Detailed examination showed the working to be identical to the pick-dressing seen elsewhere in Maeshowe. Moreover, in places the pecking on the recesses continued behind other wall-faces, indicating that the working occurred early in, or prior to, the construction of the monument. A likely Neolithic date for these is supported further by the recognition of an almost identical feature (SF16251) in situ in Structure 14 at the Ness of Brodgar in 2013. A similar pecked recess (subsequently smoothed) was also identified within internal walling 1247 in Structure 10 (SF16250). The similarities between the examples found at the two sites are striking.

At the base of the massive orthostats in the entrance passage, sub-rectangular notches might indicate where ropes were secured for transport, or to allow the levering into place of the slabs (Figure 62). There are further aspects which have escaped notice. Despite the careful rebating and scribuing of the masonry, in each elevation, rectangular areas of loose stonework, usually three small stones can be seen (Figure 61). These contrast strongly with the surrounding stonework and are not readily explained. Moreover, examination of Gibb’s 1861 depictions of the interior show these areas as voids. It is difficult to reconcile such loose stones with the careful fitting of stonework seen elsewhere. The suggestion then has to be that these were spaces during the use of the tomb, and that these were filled after Farrer’s excavations.

Similar features are found in Orcadian stone-built architecture of the 18th and 19th centuries. Here, they relate to simple wooden scaffolding, which slotted into recesses in the walls, or served as lantern-holders – or both, at different stages of construction and as needed (Leslie Burgher, pers. comm.). Could such explanations be appropriate in the Neolithic too?

4. Maeshowe

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## Art and Architecture in Neolithic Orkney

### Figure 58. Detail of chiselling at the base of the south face of the north buttress. Image © Antonia Thomas.

<table>
<thead>
<tr>
<th>Recess</th>
<th>Elevation</th>
<th>Above floor</th>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>SW</td>
<td>c. 2.2m</td>
<td>100mm</td>
<td>50mm</td>
<td>c. 25mm</td>
<td>Shallow and sloping. Along the top edge of a long stone, five courses above the entrance passage. Not as clearly defined as the others.</td>
</tr>
<tr>
<td>B</td>
<td>NW</td>
<td>c. 1.7m</td>
<td>125mm</td>
<td>62mm</td>
<td>c. 60mm</td>
<td>Rounded corners and back. In the bottom edge of the SW end of the lintel above the NW cell.</td>
</tr>
<tr>
<td>C</td>
<td>NW</td>
<td>c. 1.7m</td>
<td>160mm</td>
<td>85mm</td>
<td>c. 75mm</td>
<td>Rectangular with rounded corners and flattened back. Pecked into the bottom edge of the NE end of the lintel above the NW cell.</td>
</tr>
<tr>
<td>D</td>
<td>NW</td>
<td>c. 0.5m</td>
<td>90mm</td>
<td>120mm</td>
<td>Not visible</td>
<td>Filled with small stones and clay. Full depth not clear but the pecking and rounded morphology of the recess was clearly visible. Pecked into the bottom edge of the SW end of the long stone two courses below the NW cell, next to the W buttress.</td>
</tr>
<tr>
<td>E</td>
<td>NE</td>
<td>c. 1.6m</td>
<td>135mm</td>
<td>60mm</td>
<td>c. 40mm</td>
<td>Rectangular recess with rounded corners and flattened back. Pecked into the top edge of the long stone forming the lintel over the NE cell.</td>
</tr>
<tr>
<td>F</td>
<td>NE</td>
<td>c. 2.0m</td>
<td>120mm</td>
<td>55mm</td>
<td>c. 40mm</td>
<td>Noticeably rounded shape at back. Pecked into the bottom edge of the stone two courses above E, at the SE end of the wailing where it meets the E buttress.</td>
</tr>
</tbody>
</table>

### Figure 59. Table detailing the pecked recesses in Maeshowe. Image © Antonia Thomas.
Figure 60. Recess C on the northwest internal elevation. For wider context see Figures 44 and 61.
Image © Antonia Thomas.

Figure 61. Northwest internal elevation showing pecked recesses and areas of loose stonework.
Image © Antonia Thomas.
SUMMARY

My survey has complemented and built upon earlier work by Ashmore (1986) and Bradley et al. (2000) and demonstrated that there are a range of incised markings throughout Maeshowe. In at least one case these are overlain by pick-dressing, indicating sequences of attention even within the Neolithic. Analysis of the pick-dressing, however, suggests that whilst some of it is undoubtedly late in construction, and perhaps served as a ‘finishing touch’, other areas might have been dressed prior to, or during construction. Notches and recesses in the chamber and passage might relate to the transportation and manoeuvring of stones, or supports within the emerging structure, alluding to the complicated chaîne opératoire that allowed Maeshowe’s constituent elements to become assembled into a monument. The superimposition of chiselling on some areas of pick-dressing offers further evidence of the ongoing biography of the building, and indicate that the internal stonework continued to be attended to, and treated, after the initial construction. The identification of these treatments highlights the process by which Maeshowe came to be, and kept on becoming, and not just its ‘finished’ form at one particular point in its history (Chapter 7).

Whilst it seems incredible that so many aspects of Maeshowe’s structure have been overlooked, this is largely a consequence of our approaches. Discussions of Neolithic monuments tend to treat them as ‘ready-made spaces’, failing to account for how built structures actually came into being and falling back on simplistic typological classifications (Pollard 2013, 180). Discussions of Maeshowe take a similar line and with one or two exceptions, continue to present it as a stable, ‘finished’ building. This reductionist approach has allowed it to sit at the head of its own typological grouping (of Maeshowe-type tombs), despite its significant deviation from its own ‘type’ (Richards 1993b, 147). Taking the site as a given, most accounts devote their energy to equivocating over whether its exceptional form should sit at the start (Piggott 1954, 244; Eogan 1992, 126) or the end (Renfrew 1979, 31; Davidson and Henshall 1989, 90) of an imagined evolutionary scale. This is a problem entirely of our making. Presented as a ‘super artefact’ (cf. Bailey and McFadyen 2010, 563), the site is held in stasis. And since Farrer’s excavations, the only work undertaken in the interior has been for the purpose of consolidation. Very little is known, for example, about the original floor, and the blocking stones in front of the cells have never been moved. As a result, we have had little opportunity to collect evidence that might flesh out or even challenge those orthodoxies. The different sequences of attention and temporalities of engagement indicated by the stoneworking described in this chapter suggests a real potential for exploring the ‘becoming’ of the monument in more detail. However, without the insights that excavation can bring, discussions will necessarily be restricted to visible surfaces, reinforcing the sense of stability that we need to move beyond. As we shall see at Skara Brae and the Ness of Brodgar, excavation is the key to understanding the working/decoration of stone as integral to the processes of construction and occupation.
5. SKARA BRAE

Figure 63. William Watt’s ‘Intervention’: The sea-view window in House 1, Skara Brae.
Image © Antonia Thomas.
INTRODUCTION

If Maeshowe is the Neolithic funerary site par excellence, Skara Brae is certainly its domestic counterpart. A 5000-year-old village of stone-built houses complete with furniture and artefacts, it is ‘an archaeologist’s dream’ (Richards 1991, 24). Now on Mainland Orkney’s west coast (Figure 64), it comprises the remains, in varying degrees of preservation, of over ten stone-built dwellings, with paved passageways running between. The buildings appeared to have been abandoned at the height of their occupation, leaving behind an abundance of worked bone, stone tools, flint and pottery: one of the largest collection of Neolithic artefacts in Britain. The richness of its artefact record competes with the site’s sizeable assemblage of decorated architectural stones and until the recent discoveries at the Ness of Brodgar, Skara Brae produced the majority of Orkney’s known examples of Neolithic decorated architectural stone. The site allows the assemblages from both Maeshowe and the Ness of Brodgar to be understood within the wider context of Neolithic Orkney and forms a major focus for examination in this book.

This chapter discusses the decorated stone from Skara Brae and presents the results of my own fieldwork, which comprised a detailed visual inspection and recording of stonework on the site between 2011 and 2014. This is synthesised with a thorough re-assessment of previous surveys and archival sources dating back to Skara Brae’s initial discovery. The site has had a complicated history. Partial structural remains were revealed around 1850 but left exposed for over seventy years before any systematic investigation took place, with Gordon Childe’s ‘campaign’ of excavations in the late 1920s. Even then, the site was widely known, and attracted visitors from across the country. The unique preservation and domestic character of the remains continue to appeal to the popular imagination and it is Orkney’s most visited monument (Historic Scotland 2014b). The buildings are presented and discussed as ‘typical’ Later Neolithic dwellings, but their current contrived appearance belies the complexity of phasing on the site and has encouraged their treatment as static and unchanging. As a result, discussions of Skara Brae have tended to focus upon the form and layout of the buildings, and the superficial appearance of the site’s

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Figures 64. The location of Skara Brae (for location within Orkney see Figure 16). Image © Antonia Thomas, after Historic Scotland 2014a: 8, Map 2 and using open-source map data licensed under Creative Commons.
carvings, rather than the processes of construction, occupation, stoneworking and decoration that saw them emerge.

Along with the monuments of Stenness-Brodgar area, less than 10km away to the southeast, Skara Brae was inscribed as part of the Heart of Neolithic Orkney World Heritage Site by UNESCO in 1999. The best-preserved structure on the site, House 7 was covered in a glass roof in 1930 to allow its protected viewing, but was turfed over in 2006 in response to the increasing problem of moisture and mould. The other areas are largely open and able to be viewed from the wall-heads. Wear and tear due to high visitor footfall is one of the site’s key management concerns, whilst coastal erosion and storm damage continue to pose significant threats to the remains. The deteriorating state of the exposed architecture lends an urgency to research on the site. This is made more timely by the discovery of comparable structures with in situ decorated stonework from the excavations at the Ness of Brodgar, which have aided the identification of many previously-unrecorded carvings during my survey. In this chapter I discuss the background to, and history of archaeological research at the site before reporting upon the initial results of my own fieldwork.

ARCHAEOLOGICAL BACKGROUND

It is thought that the buildings of Skara Brae were first exposed after storm damage in around 1850 (Petrie 1867, 201). William G. Watt, then Laird of Skail and Breckness, investigated the ruins and found the remains of several structures, occupation deposits, bone and stone artefacts and pottery. Watt informed the Orkney antiquary George Petrie of the discovery and he told Daniel Wilson, who noted it in the first edition of the Prehistoric Annals of Scotland (Wilson 1851, 143). The following year Captain Thomas introduced the site in his Description of the Celtic Antiquities of Orkney as ‘a Picts house which has not yet been explored’ (Thomas 1852, 134-136). Its exploration did not wait long.

Early investigations

Watt had been gradually investigating the site himself over some 10 years when, soon after opening Maeshowe, the ‘notorious but sadly unmethodical’ James Farrer undertook his own examination (Childe 1931c, 4). Farrer opened several chambers and passages and cleared them down to their paved floors, finding extensive occupation deposits but very few finds other than a stone ‘lamp’ and some worked bone. Beyond a short letter to the local newspaper (cited in Petrie 1867, 202), there is no record of his activity. By contrast George Petrie, who often accompanied Watt in his fieldwork, kept detailed notes regarding the state of the site. He recorded Watt’s descriptions of the buildings as they were first exposed, and made careful drawings of the structures. In 1867 Petrie addressed the Society of Antiquaries of Scotland to report on the excavations at Skara Brae, describing the buildings in rich detail and illustrating his report with detailed sketches and an 1863 watercolour of House 1 by John Cairns (Figure 65).

This is one of the earliest known depictions of the buildings at Skara Brae and provides an important indicator of the level of reconstruction of House 1 by Watt, which included rebuilding most of the northwest wall and the insertion of a sea-facing ‘window’. The year after Petrie’s address to the Society, William Traill updated members on the progress made since the former’s excavations. Traill noted that Watt had ‘entirely cleared out the rubbish from four houses, and from the direction of the winding passage he hopes to find a fifth’ (Traill 1868, 431; my emphasis).

By the end of 1867, Houses 1, 3, 4 and 5 and Passage A had been almost completely excavated. Over the next fifty years, the novelty of Skara Brae waned and it lay largely untouched until 1913 when William Balfour Stewart investigated the site with ‘Professor Boyd Dawkins and other archaeological friends’ (Balfour Stewart 1914, 344). In the course of his ‘rather unmethodical excavations’ (Childe 1931c, 5), Balfour Stewart appears to have cleared House 2. It is difficult from his reporting to determine his exact activities, but his finds joined the assemblage of artefacts already collected from the site at Skail House.

Guardianship, excavation and consolidation works, 1924-1930

In 1924, the site was placed under guardianship of H.M. Commissioners of Works by William Watt’s trustees and a detailed photographic record of the site was undertaken (Figure 66). The survey proved to be prescient; in the December of that year storm waves washed away part of the site and caused extensive damage to several of the structures, in particular House 3. During 1925-26 a sea-wall was constructed and the following year attention shifted to the actual buildings themselves (Paterson 1929, 225). In 1927, the Office of Works hired a contractor, John Firth of Kirkwall, to clear the overburden off the site in 1927, overseen by C.J. Peers, Chief Inspector, and J.W. Paterson, Architect-in-Charge. Under the supervision of Paterson, House 1 was cleared down to the level exposed by Petrie and House 2, which had been partially investigated by Balfour Stewart, was fully cleared along with Houses 4 and 5.

They also undertook consolidation work, and ‘loose stones throughout [were] secretly bedded in cement’ (Paterson 1929, 229). Whilst clearing the passage between the House 1 and 2, Passage B and House 6 were partly exposed, but found to be buried in stratified midden deposits. It became clear that their excavation
In the winter of 1926-27 Vere Gordon Childe, who had recently published the seminal *The Dawn of European Civilization* (1925), had arrived in Scotland to take up the first Abercrombie Chair of Archaeology at Edinburgh University. Despite having very little fieldwork experience he was almost immediately appointed to take charge of the excavations at Skara Brae (Brophy and Sheridan 2012, 7). With Childe in charge, the following year saw more in-depth investigation on the site, with the excavation of Houses 6 and 7, and Passages B and C (Childe 1929).

Further work took place in 1929 and 1930 (Childe 1930; 1931a) and over three seasons, Childe recorded eleven stone-built houses connected by three main passages, over the remains of drains and earlier structures. In uncovering and excavating House 7 in 1928, Childe found the ‘most perfect dwelling in the whole village’ (Childe 1931c, 37; see Figure 67). This appeared to have all of its furniture and contents still in situ, leading Childe to surmise that the village had been abandoned at the height of its occupation. The discovery of a large cache of bone jewellery around the threshold of House 7 was evidence of ‘its owner’s hurried exit’ (Childe 1929, 260), whilst other items were assumed to have been ‘found in the positions which they normally occupied when the hut was inhabited’ (op. cit. 259). Thus a cow-skull which Childe found placed in the left-hand box-bed in House 7, merely demonstrated that the inhabitants had ‘taken bones to bed with them to gnaw for supper’ (Childe 1931c, 12). This initial impression, and the site’s inevitable comparison with Pompeii2 would have a profound and lasting influence upon all of Childe’s subsequent interpretations of the site (Richards 1995, 121). Less easy for Childe to explain in functional terms

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2 "Orkney’s Rival to Pompeii" claimed the Daily Express, 31st August 1929
was the discovery of a cist containing two skeletons under the eastern wall forming the back of the eastern box-bed (Childe 1929, 257). As a result of research by Alexandra Shepherd, the previously unprovenanced decorated stone on display at NMS in Edinburgh (SB14_094) is now believed to be the frontal slab of this cist.

Although earlier accounts reported ‘not the slightest trace of any pattern or ornament’ (Laing 1867), Childe found a large number of decorated stones, ranging from ‘random scribblings’ to ‘carefully executed’ designs, throughout the settlement (Childe 1931c, 150). He initially had a rather ambivalent attitude towards the decorated stones on the site, not noticing the deep carvings on the side slab of the box-bed in House 7 (SB14_020; Figure 93) until ‘sitting on the edge of this slab examining the floor in front’ (Childe 1930, 257). By his second season in 1929, however, he was actively looking for ‘the artistic side of the Skara Brae culture’ (op. cit., 191). This resulted in some 22 examples, many of which were found in situ on the walls of the passages, House 7 and House 8, and placed behind glass for their protection. Nevertheless, Childe felt that ‘a complete inventory of the often random carvings would be pointless’ (Childe 1931c, 151), and many of the loose stones lack contextual information.

When Childe excavated Skara Brae, no Neolithic domestic structures had ever been found in Orkney; with broch sites forming the closest comparanda, the buildings were assumed to be Iron Age (D.V. Clarke 2003, 85). An early centuries AD date appeared to be confirmed by the apparent link between the spatial distribution of Pictish symbol stones and carved stone balls (Childe 1931c, 101). Although Childe described the buildings as ‘Stone Age’ in his Antiquity article on the site (1931b), the final monograph was entitled ‘A Pictish Village in Orkney’ (1931c). Graham Callander strongly argued for the site being Iron Age in date, although he conceded that the inhabitants were living ‘in a Stone Age state of culture’ (Callander 1931, 112). Thus the ‘indescribable filth and disorder’ (Childe 1931c, 40) that the villagers lived in was explained because they were ‘evolutionary throwbacks’ (Richards 1995, 122; see Chapter 8). When the discovery of Grooved ware in Neolithic contexts by
Piggott at Clacton (Warren et al. 1936), pushed the date of Skara Brae firmly back, it then had to sit ‘uneasily alongside the Megalithic culture’ of superstitious tomb builders (Richards 1995, 122; see Chapter 3). The Skara Brae culture thus became defined in opposition, confirming for Childe both the secular ‘primitive communism’ of his villagers and the existence of two discrete cultural entities in Neolithic Orkney (op. cit., 124).

Large quantities of worked stone and bone artefacts, pottery and shells were also recovered during Childe’s fieldwork. Throughout, however, the aim of his excavation programme was focussed upon conservation and presentation. There were few possibilities to investigate the earlier stages of occupation on the site, and the fieldwork was necessarily biased towards structural remains. Under the remit of his excavations, Childe was not able to dismantle structures, and the lowest levels of activity were only seen in the 12 exploratory test-pits which were dug ‘with a view to the possibility of roofing over the whole complex of buildings’ (Childe 1931a, 47). As such, Childe’s fieldwork left many questions unanswered.

Excavations, 1972-73

Four decades after Childe’s excavations, a new programme of fieldwork was proposed for the site, directed by David Clarke of the National Museum of Antiquities of Scotland, with Anna Ritchie. They aimed to resolve some of the earlier discrepancies and recover material for radiocarbon dating to secure the chronology for the site (D.V. Clarke 1976a, 7-8). Two areas were investigated. Trench I was placed in the middle of the surviving settlement bounded by Passages A, B and F and House 7, its shape dictated by the position of the existing structures. It was excavated to a depth of 4.25m and revealed a complex sequence of clay, ash, sand and refuse deposits and structural remains, including the remnants of a number of buildings, chief amongst them Houses 11, 12 and 13. A second smaller area (Trench II) was also excavated at the eastern limit of the site close to the position of Childe’s test-pit IV, which contained waterlogged deposits (D.V. Clarke 1976a, 8).

More decorated stones were recorded during the 1970s excavations, including SB14_097, which is currently...
on display at the National Museum (Figure 68). The systematic sieving of samples led to the additional recovery of many small fragments of incised stone. A significant number of decorated sherds of pottery were also recovered from these two trenches along with worked bone, flint and stone tools, worn pumice, marine shells and animals bones (D.V. Clarke 1976a, 17-20). In the lowest levels, several pieces of wood, including a fine worked handle were found, as were fragmentary lengths of twisted crowberry rope (op. cit., 24-25). Two trenches excavated outside the settlement revealed further stonework (A. Clarke 2006, 68). This fieldwork remains unpublished, although publication is now expected in 2017 (Clarke and Shepherd in prep.).

Surveys, monitoring and rescue excavations, c. 1950-2014

The Department of the Environment undertook a detailed photographic survey at Skara Brae in the 1950s, allowing the first major comparison of the site with Childe’s excavation photographs. Since then, the focus by Historic Environment Scotland (and its forerunners), has continued to be on conservation and monitoring with only rescue excavations taking place. In January 1976 winter storms revealed two phases of structural remains eroding out of the section some 25m west of the site, which were recorded the following year by David Clarke (D.V. Clarke 1977a; 1977b). The beach section suffered again during the winter of 1992-93, when the Skaill knives and animal bones of a Neolithic butchery site eroded from the shore some 100m southwest of the site (Richards 1994). In March 1994, midden material and undated human remains were discovered eroding out from a wave-cut bank, also to the southwest of the settlement (Barrett et al. 1994). Coastal erosion remains a constant and serious threat.

In the late 1970s, Elizabeth Shee Twohig examined the site as part of her comprehensive survey of megalithic art (1981) and led to the discovery of several ‘new’ examples of stone decoration at Skara Brae. It was the first systematic cataloguing of the decorated stone, bringing the total number of known inscriptions to 57 (45 in situ and 12 in the NMS / site museum). Nevertheless, as a domestic, rather than funerary, site, it could not be considered ‘megalithic’ and the site was relegated to her appendix (Shee Twohig 1981, 238-239). The catalogue was not exhaustive, however, and omitted both SB14_021 (see below) and the extensively decorated edge slab which is on display in the National Museum of Scotland in Edinburgh (SB14_094). Nor were all of the identified decorated stones drawn, and they were often only described very briefly: for example, the unillustrated EST037 (SB14_072) is simply ‘Incised

Figure 68. Decorated slab SB14_097 on display. Image © Antonia Thomas and reproduced by permission of National Museums Scotland.
lines. North of 36, 9th course up’ (Shee Twohig 1981, 239). Her brief discussion, although commendable for noting the different techniques of execution of the decorated stones did not relate these to different phases or discuss their contextual placement.

Ten years after the publication of Shee Twohig’s monograph, Colin Richards analysed the decorated stones in relation to their architectural context (1991a). He noted that decoration often appears at key spatial locations, such as thresholds, and reinforces the ordering of movement along and into the houses seen in the architecture itself (Richards 1991, 28). Within the houses, he drew attention to the apparent right-sidedness in both the architectural features (e.g. the size of the box-beds) and the decoration therein, reflecting the asymmetry seen in Irish passage graves (Herity 1974, 123). This remains one of the few accounts which attempt to deal with the three-dimensionality of the site. Nevertheless, it did not address when the stones might have been decorated in relation to the long duration of occupation. Moreover, as noted by Shepherd (2000), it gave equal prominence to different processes of execution - whether pecking, cup marking or scratching – despite their dramatically different levels of visibility (op. cit., 140). Shepherd’s important study involved further survey and led to the identification of two previously-unrecorded stones in House 7. Significantly, she attempted to link particular stones to specific phases in the life of the site. Although her analysis may have been limited by its reliance upon a typological scheme (see Chapter 8), she made several insightful observations relating the motifs on the stonework to the natural patterning seen in flagstone bedrock (Chapter 9).

In 2005, AOC Archaeology were contracted by Historic Scotland to produce a comprehensive record of all known inscribed stones and potential consolidated and reconstructed stonework on the site (Sproat 2005). They undertook photographic and hand-drawn surveys in the passages and synthesised these with earlier photogrammetric surveys of the houses. These surveys were cross-referenced with previously published and archival sources (such as foreman’s reports from consolidation works). Although this produced a complete record of the architectural remains, their cataloguing of the decorated stones was rather less thorough. Although they noted several ‘new’ stones, they did not take account of many of the stones held by the NMS, or cross-reference their records with those relating to the 1970s excavations, and their list contains several duplicate numbers and omissions.

Other non-intrusive fieldwork on the site includes geophysical surveys (Bartlett and Clark 1973; Moore and Ovenden 2006), and laser-scanning as part of the Scottish Ten project in 2010 (www.scottishten.org). There are no plans for further fieldwork beyond that required for conservation and monitoring (Stephen Watt, pers. comm.).

The major part of the Skara Brae material is held by National Museums Scotland, with sizeable assemblages from the earlier excavations retained at the British Museum, the Orkney Museum in Kirkwall and Stromness Museum, where they were disposed of in 1933 on the instructions of the landowner of Skail, Henry Scarth. Many of the finds recovered from the early investigations are now lost (Alison Sheridan, pers. comm.).

THE SITE AND STRUCTURES

Skara Brae’s current coastal location is misleading; in the Neolithic, the buildings were situated some distance inland (Davidson and Jones 1985, 35). The original extent of the site beyond the excavated areas (Figure 68) is not clear and a significant part of the western side of the village has been lost to storm damage and coastal erosion. Recent geophysical survey by the Orkney College Geophysics Unit has indicated further extensive settlement remains buried in the sand dunes to the southeast of the current buildings (Moore and Ovenden 2006). What remains is merely a snapshot of the original settlement .

Phasing and chronology

Childe devised four phases of activity on the site, with Houses 4’, 6’, 9 and 10 belonging to the earliest, Periods 1/2, and the bulk of the structures within Period 3. Later activity, including four ‘re-occupation levels’ in House 7, was all included in his Period 4. Clarke reduced Childe’s sequence from four to two phases by effectively combining Childe’s Periods I and II as Phase I and his Phase III, and most of IV, as Phase 2 (D.V. Clarke 1976a, 18). Within Clarke’s scheme, Houses 4’, 5’, 6’, 9 and 10 - and Houses 11, 12 and 13 which were exposed during the 1972-3 excavations - all sit within the earlier Phase 1. The remaining structures, including House 11 from the 1972-3 excavations were placed in Clarke’s Phase II. These two phases have since been subdivided over the course of the more recent post-excavation reassessment of the site into Early, Middle and Late sub-phases, some further subdivided. An additional Phase 0, representing activity some time earlier than the establishment of the settlements proper, has also recently been added (Alexandra Shepherd pers. comm.).

To date, one hundred and forty-nine radiocarbon age determinations have now been obtained on samples from Skara Brae (Alexandra Shepherd pers. comm.). Twenty four measurements were made following the 1972-3 excavations. A further eight measurements were obtained in 1993 (Reimer et al. 2002) and 20 between 2003-2005 (Ascough et al. 2007). A horse tooth was dated in 1994 (and a horse tooth bead in 2012). A further suite of 74 dates were obtained in 2006 (Sheridan et al. 2012), seven additional dates from rodent bones in 2013 (Martinková et al. 2013) and four determinations on human bone. A further ten dates were obtained in 2015 as
part of the *Times of Their Lives* (ToTL) Project (totl.eu). A preliminary Bayesian modelling of the first 126 dates has been produced (Peter Marshall pers. comm.) and further fine-tuning of the site’s chronology will take place as part of the ToTL project. The present modelling indicates that the earliest buildings were constructed on the site circa 2910-2880 cal. BC, but were occupied for less than 80 years (Peter Marshall pers. comm.). This phase was followed by a hiatus of 1-160 years of sand accumulation and intermittent turf horizons which possibly only lasted one generation (ibid.). Phase 2, which appears to have started circa 2860-2690 cal. BC, lasted approximately 150-410 years until circa 2550-2420 cal. BC. Dates deriving from human skeletal material found on the site in the 19th century show continuing sporadic activity taking place at least into the end of the 3rd millennium (2340-1915 cal. BC (95% probability) and probably 2275-2100 cal. BC (68% probability).

The proposed subdivisions of the two-phase chronology (Clarke and Shepherd in prep.) reflect the complexity of the structural remains; each phase in fact comprises, as Clarke noted, ‘a good deal of alteration and reconstruction’ (1976a, 17). Excavation showed that the construction of the Phase 2 passages was not contemporaneous but took place in stages, with the earlier segments of Passage B preceding much of Passage A, whose final western section was completed before construction of Passage F (Shepherd forthcoming). Clarke describes one structure, House 11, as post-dating the building of House 7, but preceding that of Passage A (ibid.). Some areas of stonework (such as House 7) will therefore have existed for the duration of the settlement, whilst others will have been reused or remodelled, or even newly built late on in the history of the site, and this has clear implications for how we understand when, and why particular stones were worked, decorated and incorporated.
Across the site, the houses are built from double-skinned drystone walls with mixed cores of clay, ash and occupational material. Clay was a fundamental construction component, used in foundation layers, to seal the walls at their base and clad the exterior of the walls, as for instance, in House 4 (Childe 1931a, 40). Clay was also used in the free-standing sections of the walls in Passage A (west) and the upper and lower sections of Passage B (Shepherd forthcoming). Flat slabs covered the passages, but the roofing of the houses is not known, although whalebones found in House 1 by Watt were interpreted as rafters (Petrie 1867, 208). In House 7, Childe noted random gaps in the masonry at upper levels, describing them as ‘pigeon-holes’ which could be for holding joists ‘if it weren’t for their lack of symmetry’ (Childe 1929, 252). These may be similar to the gaps in the masonry seen in Maeshowe (see Chapter 4).

Although there are stylistic differences between the two phases, the interiors appear to follow the same basic pattern of sub-square single room dwellings, divided internally by orthostats. The earliest structures appear to have had their ‘beds’ built into the thickness of the walls, forming ‘deep, wide recesses disposed like transepts’ (Childe 1931a, 35). In the later structures, the same basic cruciform layout is followed, but the ‘neuk-beds’ are superseded by enclosed box structures projecting from the side walls. The later buildings frequently feature small stone boxes sunk into the floor, which have been interpreted as fishtanks or boxes for storing limpets (Childe 1931c, 17). Otherwise, the format of central hearth and dresser opposite the door persists throughout the settlement. All of the structures have corbelled cells built into the thickness of their walls: in Houses 4 and 5, these were connected to drains and consequently interpreted as toilets (op. cit., 35).

The earlier houses

Relatively little survived of the earliest phase on the site. House 10 lacked both a discernible entrance and a hearth, and its north wall was truncated by House 4 (Childe 1931a, 37). To the west of House 10 is House 9, the best-preserved of the earlier houses. Its doorway was blocked by Cell C2 off Passage C, possibly contemporary with the construction of House 7. To the northwest of House 9 is House 6’, which was deserted while Passage C was still in use (Childe 1930, 161). A further early structure underneath House 5, named House 5’ joined with an east-west oriented passage (Passage D) which ran under the upper level of Passage B. House 5’ and Passage D were completely separate to Passage A (op. cit., 162). House 4’ was revealed underlying the northeast corner of House 4 (Childe 1931a, 39). Seven courses of walling of a further ‘early style’, apparently free-standing, house (House 12) was exposed in the southwest part of Clarke’s Trench I (D.V. Clarke 1976a, 11).

The later houses

The northernmost of the extant structures, House 1 is accessed from an opening in the northwest wall of Passage A. It is the largest surviving building on site and was the first to be exposed in the 19th century. Subsequent storms damaged the structure and its north wall was entirely rebuilt by Watt, who also inserted a window to the northeast of the dresser. Prior to its reconstruction, this wall contained a beehive cell accessed from the north corner. A further cell was accessible only through the back of the dresser, a feature which is paralleled in House 5 on the site, and House 7 at the Links of Noltland (Graeme Wilson, pers. comm). A cell in the west wall dog-legs to run in a southerly direction; upon excavation this was found to contain a significant assemblage of worked bone, including thousands of beads (Childe 1931c, 31).

To the southwest and abutting House 1 is House 2, which was investigated by Balfour Stewart in 1913. His description of a hearth, ‘with an earthenware pot, and charred bones, too soft and broken to remove’ (Balfour Stewart 1914, 345), may describe the eastern box-bed (Paterson 1929, 230). Stewart amassed a significant assemblage of artefacts including a collection of 120 bovid and cervid astragali, a large number of limpet shells, and an incised stone ball which he found ‘in the wall’, presumably in the cell (Balfour Stewart 1914, 346). Various bone beads, and ‘a playing man with incised markings’ were found along with a stone mortar and paint pot in 1927 (Paterson 1929, 231).

House 3, largely destroyed by storms in the early 20th century, lies immediately to the northeast of; and abutting, House 1. The conjoining Houses 4, 5 and 6 are all accessed from the southeast wall of Passage A. In the 1972-3 excavations, the hearth and floor of a further structure, House 11, was exposed in Trench I. Its stonework was partially incorporated into the south wall of Passage A, which was built across it, with part of the remnant of its clay-covered western wall used as a buttress for the passage wall. There ‘can never have been enough room for [the structure] to have formed part of a complete house’ (D.V. Clarke 1976a, 17); interpreted as a unroofed but sheltered working area (ibid.), it may be similar to Structure 7 at the Ness of Brodgar.

House 7

Although included in Clarke’s Phase II as a later building, House 7 may be one of the longest-lived structures on the site, and appears to have undergone several phases of remodelling before arriving at its final appearance. The walls were standing to a height of nearly 3m upon excavation by Childe in 1928-9, who recorded a self-contained complex partly surrounded by a casing wall (Childe 1930, 170). Eight courses of an earlier phase of
this wall were subsequently revealed in Trench I in 1972-73. Clarke found that its original curving form had been remodelled, with a pillar inserted to provide a corner for a new right-angled, squared walling (D.V. Clarke 1976a, 14), ‘reminiscent of the massive corner-stones of the Maeshowe masonry’ (Shepherd 2000, 140). The narrow doorway could be closed off using a bar-hole accessible from Cell C1 outside (Childe 1929, 252). Although frequently interpreted as meaning that the building could only be locked from the outside (Richards 1991, 36), this feature has been argued to be the result of collapse or modification in Passage C, rather than original design (D.V. Clarke 2003, 90).

Once inside, and in common with other Later Neolithic houses in Orkney, the layout encourages movement towards the right upon entry, as the left-hand side is occupied by a bench and box-like enclosure (Richards 1991, 36). This apparent sidedness is emphasised by the box-bed on the right, which is larger than its left-hand counterpart, and uniquely associated with a sub-mural cist containing two burials (Childe 1929, 256-7). A corbelled cell was built into the thickness of the wall in the southeast corner to the left of the dresser; on the floor in the southwest corner are three counter-sunk ‘limpet’ boxes. A stone block, or seat, lies on the floor to the south of the central hearth; a long, low stone to the east of the hearth may also be a seat, despite Childe’s interpretation of it as a fallen pillar (op. cit., 254).

Amongst the artefacts ‘littered about everywhere’ in House 7 (Childe 1929, 259) were an axe, a carved stone ball and a significant quantity of bone beads, bone adzes, flint flakes, stone mortars and sherds of pottery. Three whalebone basins were also found: one full of ochre in the floor in the left-hand corner, and two further ones near the western box-bed (Childe 1931c, 40). It forms an impressive assemblage within an extraordinary architectural setting and most discussions of House 7 understandably concentrate upon its ‘special’ nature (e.g. Richards 1991). Despite Childe’s description of it as ‘very typical example of a Skara hut’ (Childe 1929, 251), it is the only structure incorporating burials, and contains the greatest proportion of surviving decoration, concentrated near the sub-mural cist (Richards 1991, 36). Nevertheless, the extent to which it is truly exceptional has been challenged (D.V. Clarke 2003; Shepherd forthcoming), not least, as Shepherd argues (forthcoming) that it is not possible to ascertain whether further burials exist beneath walling in the other structures.

**House 8**

House 8 stands alone at the west of the site and differs in its orientation, internal layout and furniture from the other structures. It contained several hundred chips of flint and chert débitage, which along with large numbers of burnt stone and an apparent absence of domestic material have led to its designation as a ‘workshop’ (Childe 1930, 177). Inside, the internal ‘beds’ are apparently substituted with ‘functional’ recesses (Clarke and Sharples 1985, 67), although as Richards points out, there is no clear evidence that it was not also a dwelling (1991, 40). House 8’s distinctive form has led to the suggestion that it may, in fact, be Bronze Age in date (Downes and Thomas 2013, 83; see below). This possibility has been strengthened by the recent modelling of radiocarbon determinations on the site, which have extended the main activity at Skara Brae into the Early Bronze Age or Chalcolithic (see above). Although finer dating is not yet possible, this may have significant implications for the interpretation of the carvings within House 8.

**The passages**

Childe believed the houses were deliberately buried into midden (Childe 1931c, 10), but Richards suggested that the initial buildings were likely free-standing and ‘wrapped in turf jackets’ (1991, 28). As the buildings fell into disrepair and were demolished, even if only partially, this turf would collapse, giving the site its later, subterranean, appearance (ibid.). This would be emphasised by the increasingly conjoined nature of the houses and normal accumulation of midden over time. Even in the earlier phases, the houses on the site were linked by paved, roofed passages. Passage A is the main access through the site and arcs in a northeasterly direction from southeast of House 8 to run between Houses 1, 2 and 3 to the north and Houses 4, 5 and 6 to the south. It was built in several stages, with the west half the earliest of these (D.V. Clarke 1976a, 17). Passage B runs in a northwest-southeast direction from Passage A to the north, past House 6 and 6’ towards House 7, terminating in Cell C1 and Passage C, which runs easterly and then southerly before ending ‘in a wriggle of stones’ behind House 7’s SE corner (Childe 1931a, 32). Passage C incorporates a cell in its northeast corner, Cell C2, which truncates House 9 and blocks its doorway.

The discovery in 1930 of a conduit, initially called Passage E, to the east of House 3, between Passage A and the breakwater, was interpreted by Childe as ‘a channel running out to discharge into the bay’ (Childe 1931a, 45). This led him to reconsider Passage D, found the previous year, as a sewer rather than a passage, on the basis of its lack of paved floor, its width and lintelled roof, and rename it ‘drain D’ (ibid.). Despite assigning them to period II, he conceded that D and E were too ‘high’ to have acted as drains for Houses 6’ and 3’ respectively, tentatively interpreting them as ‘designed to carry away rain-water and soakage from outside the hut walls’ (op. cit., 57). The discovery of previously unrecorded incised stones in D (see below) highlights the similarity with the other intramural passages, all of which are extensively decorated. Passage F runs from the ‘market place’ at the west end of the site and the west end of Passage A to arc...
in a southerly direction. After the entry to Cell F, the east side of Passage F continues to the south as the casing wall for House 7 and then the west face of Passage C (op. cit., 31-2).

**The end of occupation and later activity**

Childe interpreted the position of many artefacts, including the scatter of bone beads in Passage C, as evidence of an ‘abrupt desertion’ (Childe 1931c, 41). However, the placement of these, and many items in House 7, such as the cattle skull in the left-hand bed, suggest a far more considered departure from the site. When first encountered, the opening to House 6 was blocked on the inside with collapsed roofing slabs, which were mixed with cattle bones and had a further bovid skull on top (Childe 1929, 243). These can be understood as ‘closing deposits’, similar in setting and composition to some of those recognised at the Ness of Brodgar (Chapter 6). After the site’s abandonment, there is evidence for small-scale activity continuing in various forms. Later occupation on the site is represented, amongst other features, by a hearth and structural remains high up in House 7 and a skeleton found in the upper levels of House 1 by Watt (Petrie 1867). An undated intrusive cist burial was also encountered to the south of House 7 and contained a female skeleton ‘in excellent preservation, with traces of flesh still adhering to the bones’ (Childe 1931a, 59). Childe believed these to be Viking in date, a possibility given credence by the discovery of a Viking long cist containing a male inhumation some 200m W of the settlement in 1888 (Watt 1888). A comparable date is indicated by the discovery of a stone carved with simple twig rune during early investigations on the site, ‘cut by an idle Norseman when visiting Skara in the same way that modern “Goths” initial stones in Orkney to this day’ (Balfour Stewart 1914, 352). A further runestone was discovered during conservation work in 1982 (Ashmore and Johnsen 1984).

**Decorated artefacts and portable art**

Childe frequently found pottery deposited in the occupation deposits and on the house floors, but little was retained as it tended to crumble ‘at the slightest touch’ (Childe 1931c, 127). Nevertheless, he recovered a significant number of Grooved ware fragments, many of which had applied or incised decoration. Amongst the latter was the famous - but atypical - spiral-and-lozenge decorated sherd, which was used to illustrate the cover of Stuart Piggott’s *Neolithic Cultures of the British Isles* (1954). Two further spiral-decorated body sherds were found during Clarke’s excavations within a Grooved ware assemblage which ran into the thousands (D.V. Clarke 1976a, 20). The alkaline soil conditions on the site have also preserved a sizeable collection of worked and unworked bone. Thousands of bone and tooth beads and many pendants of bone and ivory have been found, a few of which are carved with motifs comparable to the decorated stonework. Many were found in groups suggestive of hoarding (Clarke et al. 1985, 61). In the

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**Figure 70. Decorated stone knives from Skara Brae.** (a): SB14_089; (b): SB14_090. Image © Antonia Thomas, reproduced by permission of National Museums Scotland.
late 19th century a crude figurine carved from whalebone was found next to the left-hand box-bed in House 3 and illustrated by Petrie (1867). Nicknamed the ‘Skara Brae Buddo’, this was long thought to be lost but was found within the stores of Stromness Museum in 2016, where it is currently on display.

Prior to the discovery at the Ness of Brodgar in 2013, Skara Brae was one of the only sites in Orkney where carved stone balls had been recovered from a secure context (the other being the Links of Noltland, Westray). Knobbed balls were found in Houses 3, 4, and 7 (Childe 1931c, 101). Balfour Stewart found a ball in House 2 with an incised geometric motif (Balfour Stewart 1914, 347, Fig.3; see Figure 28); the pattern on this, and on the three-pronged stone object found in the ‘market place’ in 1929 (Childe 1931c, 109) compare well with those seen on architectural stonework on the site. Several hollowed stone grinding mortars have been recovered from Skara Brae since its initial discovery. These were often shaped into a rough hexagonal shape, which could be skeuomorphs of similar objects carved from whale vertebrae (A. Clarke 2006, 60; Childe 1931c, 135). Many of these contained red and white pigments and were described as ‘paint pots’ (Childe 1930, 190). The use of pigments is reinforced by the discovery of worn haematite nodules (Childe 1931c, 137).

There is a relatively small proportion of cobble tools from the site and the Skara Brae assemblage is dominated by stone flakes, or ‘Skaill knives’, which apparently served as convenient butchery tools (A. Clarke 2006, 69-71). Two portable decorated stone items are often described as ‘Skaill knives’ (SB14_089-090; Figure 70), but are actually very different types of tool from one another (Saville 1994, 107). The discoidal knife SB14_089 was found by Childe just outside of the cell in House 10 (Childe 1931c, 114). This was probably a slim pebble which was subsequently ground along its edge; its smoothness may be from repeated handling, or from being kept in a leather bag as ‘a prized personal possession’ (Saville 1994, 108). By contrast, SB14_090, which was found in the floor level of an early house on the western side of the settlement in the area between Houses 2 and 7, fits what is more commonly thought of as a Skaill knife and is interpreted as ‘an entirely expedient tool’ (ibid.). Alan Saville has dismissed its design as ‘the casual sketch or trial piece...in the same way as a modern craft-potter might use the back of an envelope’ (op. cit., 110), although Shepherd (2000, 145-6) has argued against such a sketchy categorisation. Certainly its deposition in the final layers of an earlier house with a distinctive assemblage which included a stone axe, a ground stone knife, a decorated pot base sherd and a number of flint and bone tools might suggest its placement as part of a considered closing deposit (A. Clarke 2006, 123).

Decorated stonework

Prior to my fieldwork, in situ decorated stonework had been recorded in Passages A, B and C, and Houses 7 and 8 (Figure 72). The distribution clearly reflects the

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**Figure 71.** SB14_092, found by Childe ‘in the midden’. Image © Antonia Thomas, reproduced by permission of National Museums Scotland.
history of investigation and exposure on the site; it is no coincidence that those areas which have been exposed for the longest, have the least recorded decoration, whilst those which have been both protected from the environment, and have seen the most intensive study, have produced the most. Further stones were recorded in the 1970s in Phase 1 structures, and Childe recorded ‘a finely engraved specimen from the wall’ in House 6’ (1931c, 150). Decoration was clearly an integral part of the architecture even at an early stage in the life of the settlement. I have been able to add to this picture with the discovery of 24 previously unrecorded marks in House 7, House 1, Passage C and in Drain D, bringing the total number of decorated stones to 111, although this number is pending the final publication of the 1970s excavations (Alexandra Shepherd, pers. comm.). Of these, 75 are currently in situ within walls and other structural elements on the site, with a further six from structural contexts but subsequently removed. These will be discussed below.

DECORATED STONE RECORDING 2011-2014

The physical remains of Skara Brae provide an unparalleled resource for understanding Neolithic settlement architecture (Richards 1991, 25). Many of the buildings’ walls and internal stone furniture remain intact, allowing the internal spaces of the settlement to be experienced in person, and the analysis of how areas of stonework and decoration might ‘work’

![Phased site plan showing the distribution of decorated stones. Image © Antonia Thomas, after Shepherd 2000, Fig. 1.](image_url)
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together. Although the site has had a complicated history of investigation, a detailed archive, comprising consolidation records, photographs and excavation notebooks allow for a comprehensive understanding of the stonework on the site. Combined with the discovery of comparable structures with in situ decorated stonework from secure Neolithic deposits at the Ness of Brodgar, this allows for a thorough reassessment and interpretation of the art and architecture at Skara Brae.

Fieldwork methodology

A visual inspection of all extant stonework on the site was carried out during several visits between 2011 and 2013. Areas with previously identified markings, were examined and reassessed, and 24 ‘new’ examples of in situ decoration were noted. Decorated stones from the site, which are now housed in the site Visitor Centre, the National Museum of Scotland in Edinburgh, and the Historic Environment Scotland stores in Hatston, Kirkwall, were also examined and recorded.

Many of the examples currently in the NMS, although provenanced from Skara Brae, are without SF or accession numbers. There is currently no comprehensive database of the decorated stones available, but the full catalogue is expected to be published in 2017 (Alexandra Shepherd pers. comm.). Some of the other carvings in Skara Brae had been numbered several times by different authors, so I renumbered all possible Neolithic carvings from Skara Brae with a unique number prefixed with SB14 to distinguish them from previous records.

Survey results

The total number of decorated stones recorded from Skara Brae now stands at 111, although this number is pending the full cataloguing of the 1970s material. Of these, 75 are currently in situ within walls and other structural elements on the site, with a further six originally from structural contexts but removed. The remaining 30 stones were either recovered from soft deposits, whether through excavation or sieving, or are unstratified. With the exception of the decorated discoidal

![Figure 73. House 7. Distribution of decorated stones. Image © Antonia Thomas.](image)

5 See Methodology, Chapter 1
stone knives (SB14_089; SB14_090), non-architectural decorated stone is not included. The discussion below focusses upon the previously unrecorded examples.

**House 7**

There are 27 decorated stones associated with House 7, with 24 currently in situ. Of these, two were recorded by Childe and five by Elizabeth Shee Twohig. Shepherd noted two additional decorated stones, with AOC adding the previously photographed (but unrecorded) SB14_21 to the assemblage. My fieldwork led to the discovery of 14 previously-unrecorded examples. Both these and the previously-noted known examples were combined and numbered in a clockwise direction from the entrance, then continuing with the north elevation, the east elevation, etc. These are discussed in order below.

**Entrance**

Just below the lintel on the right-hand side upon entry is a stone decorated with faint chevrons (SB14_001). This is behind a glass panel and not visible due to condensation.

**North elevation (Figures 75, 76)**

SB14_002 (Figure 74) was removed by Childe from the circa 80cm high stone-built bench which abuts the north internal wall immediately on the left upon entry. He did not record its exact position, but noted that the carved face was turned inwards and not outwardly visible. Currently stored in the NMS, it has a deeply carved edge decorated with parallel lines intersected in places with diagonals and a thick ochre deposit adhered to its upper surface. Is it not clear how he recognised the stone if its decoration was hidden, but it seems likely that it came from an area of displaced stonework next to the entrance on the bench’s northwest end. At the southeast end of the bench, two courses up from the floor, is SB14_003, a previously unrecorded stone with a deeply-carved zigzag.

Three courses up from the floor in the northeast corner of House 7 is SB14_004, a red sandstone with parallel diagonal and vertical incised lines. The decoration continues behind the bench which abuts this wall; the stone can be seen in early photographs of House 7 and is original. Four courses above the bench is SB14_005, a long stone with faint chevrons and intersecting lines incised at its west end.

Three courses above and to the right is SB14_006, a small stone with weathered, faint chevrons incised into the middle of its edge. Both of these stones are original and in situ. A further small red sandstone bearing faint, weathered chevrons (SB14_023) was identified to the west of the entrance, two courses up.
**Figure 75. House 7. Northern internal elevation, showing position of decorated stones discussed in the text. For detail of boxes see Figure 76.**

Image © Antonia Thomas, based on survey data kindly provided by Historic Environment Scotland.
East elevation (Figures 77, 78)

Eighteen courses above the floor in the northeast corner is SB14_007. First identified by Shepherd (2000), this has incised intersecting and parallel diagonal lines and vague chevrons at its left (north) end. Eight courses up behind the east box-bed is SB14_008, a long stone with vague incised markings concentrated in its middle. These have not been previously noted. The stone extends behind the packing stone wedged between the east wall and the orthostat forming the southern edge of the E box-bed.

This same orthostat has incised scalariform and curvilinear marks (SB14_012), first identified by Shee Twohig (1981). Three previously unrecorded incised motifs were identified in the wall between the eastern box-bed and the southwest cell. Above and slightly to the north of the cell opening, circa 1.85m above the floor, is SB14_009, immediately to the north of SB14_013 (see below). It has faint weathered incised chevrons visible at both ends, but no marks are visible in the centre of the face. Six courses up from the floor is SB14_010, a red sandstone with a finely incised motif of empty and filled chevrons on its right-hand side.

Two courses below is SB14_011, which has at least three faintly incised infilled chevrons. All of these stones are shown in their current positions on early photographs and are therefore original and in situ.

South elevation (Figures 79, 80)

Although the most visible upon entry, this elevation is the least decorated stretch of walling in House 7, with only one example identified. Immediately to the south of SB14_009 (see above) is SB14_013, first identified by Shepherd (2000). Seven courses above the cell opening, this large stone has incised intersecting parallel and diagonal lines concentrated on the left-hand side of its face. No markings were visible on the stones in the dresser. Eight courses up on the SW side of the interior of the cell in the southeast corner is SB14_014, a stone with a series of radiating vertical and diagonal lines incised into its right-hand side. The stone’s surface is quite mouldy and the lines are not easily seen. It has not been noted previously.
Figure 77. House 7. Eastern internal elevation, showing position of decorated stones discussed in the text. For detail of boxes see Figure 78. Image © Antonia Thomas, based on survey data kindly provided by Historic Environment Scotland.
'Limpet box’ in southwest corner (Figures 80-82)

Three stone ‘limpet’ boxes are cut into the floor in the southwest corner. An extensively decorated stone (SB14_015), with incised and carved parallel vertical and diagonal lines and zigzags along one of its edges, was found lying on the floor adjacent to the northwest side of the box nearest the hearth. It seems that this was originally part of the overall box feature, but the stone is now lying loose on the floor. Its position on the (modern) sand of the floor would ordinarily militate against it being original feature, but the stone is clearly identifiable in its current position in early photographs of House 7 (e.g. Figure 67), suggesting that, incredibly, it has been
Figure 79. House 7. Southern internal elevation, showing position of decorated stones discussed in the text. For detail of boxes see Figure 80. Image © Antonia Thomas, based on survey data kindly provided by Historic Environment Scotland.
lifted and replaced several times, yet never noticed to be decorated. It is in a poor, laminating condition. A further decorated stone associated with this feature forms the southwest upright stone in the box and bears three diagonal incised strokes along its edge (SB14_024).

**West elevation (Figures 83, 84)**

This elevation is on the right-hand side upon entry and is the most heavily decorated. Two bounded areas occupy the floor in front of the wall; the larger, more southerly of these is described as a ‘box-bed’ and is the focus for the densest concentration of decorated stones in House 7. The most striking of these is the frequently illustrated SB14_020, the northeast-southwest orthostat forming the boundary of the bed. It was first noted by Childe (1929, 257) and has deeply carved vertical and diagonal lines and chevrons (Figure 93) along its upper edge. SB14_021 is on the edge of a stone c. 65 cm above floor level in the box-bed. AOC listed it as a ‘new’ discovery (their No. 064) in their 2005 survey, recording it as having three vertical lines carved into its right-hand edge. In fact, this stone is decorated with carved vertical and diagonal lines along the entirety of its outer face, but is mostly concealed by the upright slab leaning against it. This likely explains why neither Shee Twohig or Shepherd note the stone in their inventories. Nor does Childe, despite the fact that the stone was not only photographed in 1928 by Tom Kent (NMRS: O2417PO), but discussed alongside a reproduction of the photograph by Hugh Marwick the following year (H. Marwick 1929, 23; Fig. 2).

A further stone, currently on display at NMS had been unprovenanced, although clearly part of the Skara Brae material from Childe’s excavations (Alison Sheridan pers. comm.). This large flagstone slab is extensively decorated with incised and carved diagonal and vertical lines and chevrons along its long edge (SB14_094). As a result of recent research by Alexandra Shepherd, this can now be considered as an original element of the sub-mural cist in the west wall behind the box-bed in House 7 (Shepherd 2014). Three courses up from the floor to the southwest of the box-bed is SB14_016, a long stone with parallel diagonal lines ‘chopped’ at its right end. This previously unrecorded stone is in its original position and can be seen in early photographs. Three further stones were recorded by Shee Twohig (1981). The small packing stone for the south orthostat of the box-bed has short parallel ‘chopped’ lines on its upper face (SB14_017). She also identified a series of diagonal, vertical and horizontal incised lines (SB14_018) on the lintel for the aumbry above the box-bed and a further stone with various crude peck marks on its southeast and northeast faces (SB14_019), on the south corner of the alcove above SB14_018. These are original.

The NNE-SSW oriented orthostat forming the eastern boundary of the enclosure to the north of the box-bed has sweeping diagonal and horizontal incised lines on its rear face (SB14_022). This stone is shown on early photographs in its current position; the markings have not been noted previously.

**Stones removed from House 7**

Although not mentioned in his publications, SB14_083 is listed in an unpublished notebook (Childe 1928-30a, 53) as also from House 7, although the exact findspot is
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unspecified. Now stored at Hatston, the stone is extensively decorated on one edge with a series of finely incised concentric chevrons and intersecting lines (Figure 91).

House 1 (Figure 85)

Some of the internal walls of House 1 have in some cases been exposed to the elements for over 150 years; others have been heavily consolidated or even fully remodelled. Despite these factors, two previously unrecorded markings were identified on original areas of stonework during my survey (Figure 85).

Roughly chopped parallel lines (SB14_025) were recorded on the lower of the two north-south oriented orthostats forming the eastern edge of the western box-bed, and must have been carved before the upper slab was put into place. These are similar to those identified outside of House 6 in Passage C (SB14_065), and examples recorded at the Ness of Brodgar (e.g. SF5884). Although House 1 was extensively reconstructed by William Watt in the late 19th - early 20th centuries, this work appears to have been largely confined to the seaward part of the structure. Moreover, the shape of the two horizontal orthostats forming the edge of the western box-bed matches closely the appearance of these stones in the 1860s etching of House 1 by John Cairns (Figure 65) and this stone appears to be in its original position.

SB14_026 is in the southwest corner of House 1. It consists of two faintly incised parallel, diagonal lines

Figure 81. Detail of SB14_015. Image © Antonia Thomas.

Figure 82. The ‘limpet box’ in the SW corner, showing the position of SB14_015. Looking NW. Image © Antonia Thomas.
on a stone one course above the lintel over the opening in the SW wall. The stone is in a poor condition and the outer surface has laminated away; the motif would have originally been more extensive. Examination of early photographs (e.g. Figure 66) and accounts of the renovation work indicate that the stone is original. Although other areas were examined for further markings, none were identified.

**House 8 (Figure 86)**

There are ten decorated stones recorded from House 8, with six currently in situ on internal elevations and three on external stonework. Three filled lozenges are incised into the middle of a stone (SB14_027) in the wall behind the secondary buttress in the southeast corner of the interior. A similar motif, comprising four lozenges separated by vertical lines and filled with a lattice pattern is on secondary walling, also in the southeast corner (SB14_029). A further stone, three courses above the sill of the cupboard in the east alcove, is marked with an irregular zigzag (SB14_033). These were first recorded by Childe (Childe 1930, 183-4) and are currently behind glass panels, no longer visible due to condensation.

SB14_028 is a single vertical incised line on a stone in the third course of the upper east alcove, with SB14_030, eight courses up on the right-hand side of the south entrance. This has a series of incised parallel and intersecting lines along its face. SB14_031 is a long stone with a series of pecked marks along its edge in the west outer face of the porch. These three stones were all first recorded by Shee Twohig (1981). Shee Twohig also noted some marks which seemed quite ‘fresh’ on the southeast outer wall (SB14_032) and which were probably recent. On the middle shelf in the north cupboard on the eastern side, Childe noted a stone (SB14_034) bearing carved lines with ‘no pattern discernible’ (Childe 1930, 184). This was not located during my survey.

During their 2005 fieldwork, AOC recorded previously unidentified markings on the upper sill stone of the southeast cupboard (SB14_035); these did not look convincing during my survey. Although the distribution plan (Figures 72, 86) points to a heavy concentration of decorated stones in House 8, therefore, this is somewhat misleading, as several of the examples noted above are contentious. The weathering and lichen encroachment on the surface of the masonry prohibits the identification of markings and no additional incised stones were recorded in situ in House 8 during my survey. SB14_114 is on display in the Visitor Centre. A long slab with a series of pecked, incised and carved curvilinear and geometric designs along one face, and less extensive markings on its side, this was described by Childe as a pillar behind the hearth (Childe 1930, 184). There is no evidence that it was ever upright, however, and it was probably a fireside ‘perching stone’.

‘**Drain D’**

Promoted by Jane Downes, who had noted possible markings there in the 1990s, ‘Drain D’ was examined and faint diagonal and parallel intersecting incised lines were identified on eight stones. These are numbered SB14_036-043; none of these have been recorded previously. Four incised stones were identified on the northwest side of the passage. A series of faint intersecting lines forming vague cross-and-lozenges can be seen on a stone two courses below the first capstone to the southwest of the hatch (SB14_038). Two courses below are a stone with two faintly incised chevrons (SB14_039); and one with faint incised zigzags (SB14_040). Finely incised parallel lines were seen along the bottom edge of a long stone in the course below SB14_040.

There are three decorated stones on the southeast side of the passage. Three courses down is a stone with faint diagonal and vertical intersecting and parallel lines (SB14_036). Three courses below is a stone with vague diagonal lines on its right-hand (southwest) end (SB14_043); on the course below are very faint markings including a diagonal line and a cross (SB14_042). Part of this walling is shown in the foreground of Childe 1930, Plate XXX (1), in which stone SB14_036 forms part of the upper course. This is now overlain by modern stonework and a concrete cap but appears to be in situ. The second capstone in the roof of the passage when moving in a southwest direction has several deeply incised lines in its edge (SB14_037); these were made before the capstone was laid, but it may have been replaced / moved. Drain D has been open to the public since 1929, when Paterson oversaw the insertion of the concrete hatch and rungs, a feature which was ‘much appreciated by visitors’ (Childe 1931a, 73). Nevertheless, the similarity to other incised motifs in more secure contexts makes it likely that they are authentic and suggests that other inaccessible areas may also have unrecorded markings.

**Passage A (Figure 88)**

There are 14 decorated stones from or in Passage A. A stone carved with lozenge designs (SB14_049) was recorded by Shee Twohig eight courses up between Cells 3 and 4; this is broken across the motif and appears to have been re-used in its current location (Figure 87).

The other stones are concentrated in the narrow stretch between Houses 2 and 6, and around the western entrance. Thirteen courses up in the north wall on the western corner of the entry to House 2 is SB14_045, a pecked stone first recorded by Childe; on the western side of this entrance is SB14_046, which is covered with vertical and diagonal intersecting lines. As noted
Modern stonework

016

017

018

019

020 on ‘bed’ forward of elevation
022 on rear of slab to right of door
094 presumed from sub-mural cist

Figure 83. House 7. Western internal elevation, showing position of decorated stones discussed in the text. For detail of boxes see Figure 84.
Image © Antonia Thomas, based on survey data kindly provided by Historic Environment Scotland.
by AOC (Sproat 2005), this stone has been smoothed or polished prior to being incised (see discussion). A long reddish stone just to the east (SB14_047) has intersecting incised lines. SB14_048 is four courses up between House 2 and the entrance to Cell 3. Three incised stones (SB14_053-055) are to the east of the entry to Passage B. SB14_055 was not illustrated by Shee Twohig and is described as having an ‘inconsequential design’ (1981, 239). Two stones with rough pecking (SB14_056, SB14_057) are situated close to the entrance to House 6.

Five courses up in the inner north angle of the entrance porch at the west end of Passage A is SB14_044; this is almost opposite SB14_052 on the south side. These both have intersecting incised lines and were first identified by Shee Twohig. Three courses up in the outer corner of this entrance is SB14_050, which has incised and pecked markings and is now behind glass. Immediately above is SB14_051 with three incised lines. Both of these were recorded by Childe (1930, 182). A further slab with incised zigzags, chevrons and a cross-and-lozenge motif was found by Childe ‘loose in A’ (SB14_081) and is currently stored at Hatston in Kirkwall.

**Passage B (Figure 89)**

There are seven decorated stones in Passage B. Four courses up on the east side of the passage, SB14_058 has intersecting incised lines along its face. Three further decorated stones form a grouping on the west
Passage C (Figure 90)

Passage C has eleven recorded in situ decorated stones. Three stones form a group opposite the opening to Cell 1. An incised stone with diagonal and vertical lines forming lozenge and chevron motifs was recorded by Shee Twohig seven courses up on the west side of the passage (SB14_067); this is slightly to the east of SB14_068 which has similar motifs. Immediately below is SB14_069 with faint diagonal lines. Six incised stones (SB14_071-076), all with faintly incised intersecting diagonal and vertical lines, form a cluster on the west side opposite the opening into House 9. SB14_070 is seven courses up in the angle of walling opposite the opening into Cell 1 and has a faint cross-and-lozenge motif. These were all first recorded by Shee Twohig (1981); a further stone with incised zigzags and chevrons (SB14_066) was found ‘high up in the wall of Passage C, near entry T’ (Childe 1930, 182). This was apparently removed from site and is now stored in the NMS but not viewed by me.

Other houses and areas on site

An orthostat on the left-hand side entering Cell F, to the northwest of House 7, has incised and pecked designs, including cupmarks (SB14_077). It was first noted by Childe (his No.5). It is currently under glass and not visible due to condensation. A previously-unrecorded stone with parallel chopped lines (SB14_065) was noted during my survey to the east of the south entrance to House 6, opposite House 7. This was similar to the markings identified on the side of the box-bed in House 1 (SB14_025).

Following the discoveries in Drain D, an attempt was made to investigate Drain E, but the walling nearest the opening was obscured by thick green mould, and the remainder of the passage was blocked by a large decomposing rat. No further inscriptions were identified in the rest of the site, but in exposed areas, the stonework has seen significant weather erosion and lichen encroachment, and very little of the original surfaces could be seen. In these areas,
the lack of incised motifs is likely to be taphonomic rather than reflecting the true distribution. More detailed examination would undoubtedly reveal additional unrecorded examples; at Maeshowe and the Ness of Brodgar subsequent stages of fieldwork have always led to the identification of further markings.

Other stones removed from the site

The large decorated slab from Trench 1, currently on display in NMS (SB14_097; Figure 68), is one of the finest examples from the site. It was found at the base of a wall which formed part of a structure predating Passage A (Shepherd 2000, 146). The two decorated stone knives from the site (SB14_089, SB14_090) were recovered from House 10 and an early house predating Passage A respectively (Figure 70). These are currently on display at NMS, along with SB14_092, a small rectangular stone decorated with an incised cross-and-lozenge motif which was found ‘in the midden’ (Childe 1930, 184; Figure 71). Other portable decorated stones include a small subcircular flagstone slab with finely incised designs on both faces (SB14_096) from a sand layer predating Passage A (Shepherd 2000, 147), a small heart-shaped flaked flagstone with a finely incised lattice pattern (SB14_110), and an unstratified small slab with an incised grid pattern from Trench 1 (SB14_104). Other incised fragments were recovered during sieving in the 1970s.

Three stones from unspecified locations on the site are stored at Hatston. These are SB14_079, a large slab with incised lines and a pecked ‘net’ pattern; SB14_080, which has a pecked design of interlinked lozenges on its face and an incised boxed triangle motif on its edge;
and SB14_082, a thick slab with a design of filled chevrons and lozenges. A coarse sandstone cobbie with a cross carved into it (SB14_086), a flagstone slab with intersecting carved lines (SB14_087); and a broken slab with pecked hollows and deep carved lines (SB14_088) were also viewed in the NMS stores. These were recovered during Childe’s excavations but their findspots were not recorded. SB14_078, SB14_084, SB14_085 and SB14_091 are likewise from unspecified locations on the site. They were described by Shee Twohig as her Nos.43, 53, 54 and 55 respectively but were not located during my survey; nor was SB14_093, described by Childe as an ornamented slab of shale from the midden between Passages A and F.

DISCUSSION

Skara Brae is truly a remarkable site. Nowhere else in northern Europe can standing Neolithic stone-built houses be studied, in person, and compared with the remains of contemporary funerary sites. Much of the site’s stonework contains original, in situ carvings, which compare well with those found both in secure Neolithic contexts at the Ness of Brodgar, and at upstanding tombs throughout Orkney. Despite this potential, the site’s domestic context has often caused its marginalisation in discussions of Neolithic art (e.g. Nash 2012; see Chapter 3), and in many ways, Childe’s interpretations continue to permeate narratives of the site’s art and architecture. Skara Brae’s presentation as a simple ‘domestic’ settlement, with all the functionalist connotations this term brings, has been particularly persistent, and the village has become the typological standard for Later Neolithic dwellings. Narratives of the site also continue to focus on the idea that the houses were abandoned ‘in haste’, with the implication being that the site as we see it now represents a village ‘frozen in time’ at the point of its abandonment. As such, the potential of the upstanding remains has been largely unrealised, and the site is frequently discussed in the same way as if it were ‘remaining only as a two-dimensional plan’ (Richards 1990, 112).

These assumptions break down with a more in depth study of the site and any dualism between ‘domestic’ and ‘ritual’ is hard to sustain. Two burials were interred in a primary stage in House 7, and the abandonment of the site was marked by a series of rites, or ‘closing deposits’, which can be compared to similar events at the Ness of the Brodgar. Despite the site’s division into two broad phases, the overall picture is not one of a series of static, largely unchanging buildings, but a dynamic settlement which was constantly being altered throughout its occupation. Different sequences of attention, and temporalities of engagement, are implicated in the various stages of construction, reconstruction and redevelopment.
055 not drawn

Figure 88. Distribution of decorated stones in Passage A. Image © Antonia Thomas, after Shee Twohig 1981, Fig. 288.
**Chronology and authenticity**

Childe noted that ‘owing to the soft nature of the stones, scratches may very easily be made upon them accidentally — for instance in cleaning a trowel — and such will, after a year’s exposure, come to look quite old and weather-beaten’ (Childe 1930, 181). Citing Childe’s observation, Clarke implied that many of the decorated stones could in fact be ‘inadvertent modern creations’ (D.V. Clarke 2003, 89); other authorities have suggested that the carvings at Skara Brae may be ‘much later prehistoric insignia’ (Nash 2012, 137). There is, however, no reason to think that the majority of the decorated stones recorded on the site are anything other than Neolithic. Many of them are strikingly similar to examples from secure Neolithic contexts at the Ness of Brodgar, and within both the passages and House 7, the low level of the carvings makes it unlikely that they were made after the settlement fell into disrepair. Moreover, the presence of carvings on early structural elements within House 7, such as SB14_004, which is partially hidden by the bench which abuts the north wall, and SB14_008, which is partly obscured by the eastern box-bed, indicates that decoration took place at an early stage. This is supported by the discovery of several carved stones in early layers and structural elements during the 1970s excavations, and the identification of inscriptions in ‘Drain D’, clearly a Phase 1 passage rather than a drain. Even in the earliest phases, decoration was integral to the site.

As Colin Richards points out, however, *contra* Clarke (1976a, 18) over many generations, the settlement would have experienced the refurbishing, demolition and reconstruction of buildings in a piecemeal and organic fashion (Richards 1991, 25). Materials would have moved around the site, re-used and appropriated in newer phases of build (Childe 1931c, 93; Richards 1991, 25). In some cases, structures were levelled and had later buildings superimposed on them, other houses were reworked or incorporated into later constructions. But the crucial question of *when* particular stones were decorated, has rarely been explored.

**Decorated stonework: motifs and execution**

Although there are a small number of cup-marked and pecked stones, the assemblage is dominated by incised and carved examples. In several instances, as seen at the Ness of Brodgar, incised motifs are overlain by carvings, suggesting that lighter scratches acted as sketches for subsequent designs. Pecking is recorded on seven *in situ* stones, but only SB14_077, the orthostat at the entrance to Cell F, has cup-marks. This is currently under glass and could not be viewed in detail, but examination of early photographs appears to indicate several phases to the decoration. These will be discussed further in Chapter 8.

As noted at Quoyness, Maeshowe and at the Ness of Brodgar, many of the incised designs are found on *polished* stones. This makes the marks more prominent, an effect which has been suggested for the use of pigment on stone (Bradley 1998b, 390; Isbister 2000, 194), and could be a preparatory stage for incising. At Skara Brae, the polishing seems to be confined to individual stones, suggesting it is deliberate (not caused by friction from movement of animals or people, for example), and occurred prior to (or during)
construction. This observation has some interesting implications. Whilst many of the incised designs are difficult to date, as they could have been made *at any point* in the history of the site, the possible preparation of stones through polishing indicates that their placement, and decoration, was an early objective. The frequent use of deeper-hued orange and red sandstones for incised designs, particularly in House 7, may suggest a similar intention. This implies that in some instances, the art and architecture were, as suggested by Richards (1991), executed in combination.

In common with other Neolithic sites in Orkney (Chapter 3), the incised decoration is overwhelmingly in the form of linear, geometric motifs. These are dominated by diagonal intersecting lines which often form coherent chevron and
zigzag patterns, a pattern which is particularly notable in House 7 (Figure 91). This pattern was noted by Shepherd (2000) and has been further emphasised by the new examples found in my survey. House 8, is notable for two lozenge-decorated stones (SB14_027, SB14_029) but its other stones bear less coherent marks. Outside of Houses 7 and 8, discrete motifs are rare and most of the recorded stones have more random incised lines. Again, this might reflect the partial weathering of designs in these areas.

**Decorated stonework: context and distribution**

The concentration of carvings in Houses 7 and 8, in addition to the passages, has often been cited as evidence for the special nature of these structures (Richards 1991, 36). But House 7 and 8 were only exposed by Childe, having been effectively sealed since the Neolithic, and access to House 7 was restricted soon after its excavation. It is perhaps not surprising that it is here, and in the parts
of the passages with the greatest level of preservation, that the densest concentration of decorated stones has been recorded. House 1, however, was uncovered in the 1850s, left open to the elements for several decades prior to its systematic investigation, and was then subject to several phases of consolidation and restoration. The unexpected discovery of weathered markings on original stonework in House 1 further suggests that the distribution at Skara Brae is at least partly taphonomic.

Notwithstanding the biases of preservation, House 7 appears to have remained a focus for the settlement throughout its occupation and its number of decorated stones may also reflect this longevity of use. At the Ness of Brodgar, the densest concentration is found inside Structure 1, which likewise provided a focus for the complex through many phases of activity. In both cases, the implication is that decoration was a feature of both the initial construction and the ongoing development of buildings. At Skara Brae, the density of decoration extends to House 7’s exterior and Passage C. With the exception of the newly recorded SB14_026, which is on the external wall of House 6’, all of the known decorated stones appear on the western side of the passage and are thus on the outside of, and relate to, House 7. A parallel can be drawn with the passage between Structures 1 and 11 at the Ness of Brodgar, where the external wall of 1 (the west side of the passage) is heavily decorated, yet the east side is barely marked at all (Chapter 6).

The prevalence of decorated stones at thresholds and changes in architectural direction along the passages has been noted previously (Richards 1991). Pecked motifs in particular seem to be concentrated at ‘pinch points’ (Figure 72), which Shee Twohig surmised was to allow them to be felt in dim lighting, and even ‘introduce’ an area of incised designs as one moves through the passages (Shee Twohig 1997, 381). However, the relative positioning of thresholds, and the ‘sidedness’ of movement will have changed and shifted as new houses were built abutting older ones, or were partially levelled to make way for newer structures. They would not have remained static throughout site’s history, rendering any interpretation based upon their final position difficult to substantiate without detailed stratigraphic investigation of the different structural elements.

Despite these caveats, the number and preservation of the incised motifs in House 7 allows a detailed discussion of the distribution and context of decorated stones within this particular building. As at Maeshowe, the visible decorated stonework at Skara Brae is concentrated in clusters, often with three or four decorated stones appearing next to one another as part of a ‘scheme’. In House 7 (Figure 73), clusters appear in the corners of the building with the similar chevron-decorated SB14_010 and SB14_011 next to one another, and adjacent to SB14_009 and SB14_113, all in the southeast corner. There is a further concentration around the right-hand (western) box-bed, including SB14_020 (Figure 93) and the western wall - which overlay two inhumation burials. Throughout House 7, the majority of the incised stones were recorded at a relatively low level, with 10 of the 24 in situ stones at only 50cm above floor level or lower (Figure 92). This is a marked contrast with Maeshowe, where most of the incised motifs occurred at adult eye-level, in a range between 1.0 and 2.0m in height. This may reflect the domestic, intimate scale of the dwellings (cf. Bradley 2009, 118) and also raises questions about the visibility and intended audience, for the carvings.

Visibility and audience

Whilst some of the above observations suggest that some decorated stones were meant to be seen, there are many cases where this is difficult to argue. Indeed, with the exception of the bed-slab (SB14_020), the overall impression of carvings in House 7 is ‘muted, almost secretive, rather than one of conspicuous display’ (Shepherd 2000, 141). Several stones (e.g. SB14_004 and SB14_008) are obscured by stonework; others are so inaccessible as to be barely visible. The frequent placement of decorated stones low to the ground in passages, or in the corners of buildings, works against their display. The presence of ‘hidden’ stones further suggests that the visual appreciation of the carvings was not a consistent concern.

As with Maeshowe, the impracticality of being able to dismantle any of Skara Brae’s walls means that the discussion is again largely limited to the visible surfaces of the stones. But where earlier phases of structures have been exposed, or where walling has been removed, ‘hidden’ decorated stones have often been found. In some cases these have clearly been re-used (e.g. SB14_049, Passage A; Figure 87). This is, however, in a quite different context from the large decorated slab SB14_097, which was broken when found, and also apparently ‘re-used as an ordinary building slab in a wall’ (D.V. Clarke 1976a,
20), in a structure predating Passage A (Shepherd 2000). As arguably the finest example of decorated stone from the site, it seems unlikely that its placement is coincidental. At the Ness of Brodgar, several decorated stones have likewise been deliberately built into foundation levels or primary stages of walling (e.g. SF16861, SF16868).

The large decorated slab found at Barnhouse may offer a further parallel. Although this was recovered from the field surface above House 5d, it is believed to have originated from the lower course of a house wall (Downes and Richards 2005, 78). These examples suggest that SB14_097 was a foundation deposit. This idea will be explored further in Chapters 7 and 9, but the current discussion, it highlights the importance of context, and how different stages of construction and reconstruction on the site, might relate to the decorated stones.

SUMMARY

Skara Brae is the best-preserved Later Neolithic settlement in northern Europe, and contains one of the largest assemblages of architecturally-situated carvings in Britain. Seventy-five of these are currently in situ, meaning that they can be analysed in largely the same positions that they were experienced in the Neolithic. This extraordinary state of affairs is not, however, as simple as it seems.

Although it is presented as an authentic picture of the village at the end of its inhabitation (D.V. Clarke 2012), the extant site is actually an ad hoc assemblage of different phases, presented for the public as broadly contemporary and contiguous. The survival of both houses and passages at Skara Brae allows for a unique analysis of movement along and between the structures on the site, but this is limited to the settlement as it was at its final stage of occupation (Richards 1991, 30). As a result, discussions of Skara Brae have tended to treat it as static and unchanging, focussing upon the form and layout of the buildings, and the superficial appearance of the site’s stonework, rather than how they emerged through process. In many ways, therefore, the manner in which Skara Brae has been discussed is symptomatic of the assumptions which pervade many narratives of Neolithic art and architecture. Like Maeshowe, discussions of the site have tended towards typological classifications, treating the buildings as ‘ready-made’, and rarely attending to the processes by which they came to be built, modified, occupied and abandoned over the long duration of activity on the site. Limited to discussions of form, however, the visible and visual characteristics of stones are prioritised, leaving little room for engaging with the variety of context and placement.

Analysis of the decorated stonework reveals something of the complexity that we are likely to be dealing with. We may not be able to dismantle the walls to examine fully the processes of construction, but in each case in the past where stonework has been removed, or structures excavated, ‘hidden’ carvings have been found. Some of these may have been re-used, but in other cases, they appear to have been deliberately placed in such a way that they would have been out of sight once a structure had been created. As discussed in Chapter 2, this observation runs counter to many archaeological narratives, which are predicated on the assumption that all forms of mark-making are art or decoration, with all the baggage of assumed visual consumption implied by those terms. This opens up the discussion to think about the wider biographies of construction and inhabitation and how these might relate to the carving, placement and appreciation of decorated stones. The discovery of ‘hidden’ stones is, of course, largely a function of opportunity; rarely are we afforded the chance to see beyond, behind and beneath the surfaces of structures to unpick their biographical details. As we will see in the next chapter, to understand fully the way in which art and architecture relate to one another in the Neolithic, demands a more comprehensive deconstruction that can only be achieved through excavation.
6. THE NESS OF BRODGRAR

Figure 94. SF16258 during removal from Trench P, The Ness of Brodgar. Image © Antonia Thomas
INTRODUCTION

The Ness of Brodgar is almost equidistant, and inter-visible, from the Ring of Brodgar (0.75km to the NW) and the Stones of Stenness (0.5km to the SE), with Maeshowe 1.5km to the east. Barnhouse is just 300m away. Broadly contemporary with these other sites, it is an integral part of the incredible archaeological landscape focussed upon the Brodgar and Stenness peninsulas (Figure 95) and excavations at the Ness of Brodgar are redefining our knowledge of Neolithic Orkney. The remarkable complex comprises several monumental structures, with walls often surviving to over a metre in height. Many of these incorporate stones which have been purposefully decorated, and the Ness of Brodgar contains the largest assemblage of Neolithic art in the UK. Over 600 decorated stones have now been recovered from the site and these form the main focus of research in this thesis. I have been part of the fieldwork team at the Ness of Brodgar since 2006 and have been able to analyse the site’s art and architecture as it has been exposed, excavated and dismantled. These observations form the foundation for this chapter.

In the previous two chapters, I introduced the decoration and stonework at Maeshowe and Skara Brae. A funerary site and a domestic settlement respectively, they are in many ways the ‘type-sites’ of what was once thought of as polarised social arenas. This dualism becomes hard to sustain in relation to the Ness of Brodgar. The stone buildings combine elements more commonly associated with domestic structures, such as dressers and hearths, with standing stones and pick-dressed masonry, features which had previously only been found in funerary or ceremonial contexts in Orkney. The quality and preservation of the site’s architecture is matched by its incredible material culture. Polished stone axes, maceheads, decorated Grooved ware pottery and imported stone and flint tools all feature within an artefact assemblage which runs into tens of thousands of small finds (Anne Mitchell, pers. comm.).

Tourist footfall is amongst the largest of any site in Orkney with hundreds of visitors each day during the fieldwork season, and the Ness of Brodgar’s attraction is evidenced by the large number of popular

![Figure 95. Aerial view of the Ness of Brodgar during excavation, showing the relative position of Maeshowe, Barnhouse and the Stones of Stenness (looking SE). Image © Hugo Anderson-Whymark, with annotations.](image-url)
international publications which summarise aspects of the site (Card 2010; 2013; Balter 2014; Smith 2014). These were joined in 2015 by the first official guidebook (Towers et al. 2015). Above and beyond this general appeal, the excavations offer a huge potential for academic research to take place whilst the site is being uncovered, allowing for an unparalleled contextual understanding of *in situ* Neolithic material culture. This is particularly apparent in relation to the decorated and dressed stone from the site, many of which use distinctive materials or exhibit styles or techniques of working which are without parallel in Orkney.

Fieldwork on the site is ongoing and details relating to the finer points of phasing and chronology may be subject to reconsideration as the excavations progress. Nevertheless, the art and architecture on the site is of such a size, range, quality and level of preservation that detailed and meaningful stratigraphic interpretations can be drawn even at this stage. Moreover, the insights afforded by the dismantling of structures through excavation allow a detailed understanding of the processes of construction on the site, and how this relates to stoneworking and decoration. Although the ‘cut-off’ point for my analysis was the end of excavation in 2013, I have included observations from the 2014 and 2015 excavations where they affect the interpretation of the site. The case studies in Chapters 7, 8 and 9 are largely drawn from the Ness of Brodgar material; in this chapter I present the site and its archaeological background before introducing my fieldwork and recording.

**ARCHAEOLOGICAL BACKGROUND**

When he visited James Wishart on the farm at Brodgar in 1925 (see Prologue), J.G. Marwick noted that the field contained ‘much of archaeological interest’, expecting the farmer to give ‘timely notice of any further discovery’ (J.G. Marwick 1926, 35). It was nearly another 80 years before anything else was reported. Wishart was long dead, and the farm of Brodgar was now owned and farmed by Arnie Tait. In 2003 he found a notched slab during ploughing which has led to the discovery of one of the most extraordinary Neolithic sites in Europe.

Magnetometry (GSB Prospection Ltd 2002) and resistivity surveys (Mackintosh and Damianoff 2003) suggested extensive archaeological activity across the isthmus (Figure 97). Subsequent test trenches indicated that the mounded appearance of the site was largely artificial, comprising structures, middens and deep midden-enhanced soils dating to the Neolithic (Card 2004; Card and Cluett 2005; Cluett 2007). Arnie Tait’s slab was initially thought to be part of a Bronze Age burial cist, but excavations by Glasgow University’s Archaeological Unit, GUARD, exposed something rather different: a large stone-built structure resembling Structure 2 at Barnhouse (Ballin Smith 2003; Figure 96).

**Trench P excavations, 2007-2013**

In 2007, Trench P, was opened to uncover the extent of this building (Structure 1). Excavation has since revealed

![Figure 96. Ness of Brodgar, Structure 1 revealed during GUARD’s excavations in 2003. Image © ORCA.](image-url)
the remains of over 15 structures, representing several phases of occupation, but all apparently Neolithic (below). 

**Trench J and the northwest enclosure wall**

In 2005, excavation in Trench J revealed a >4m-wide stone wall surviving to over 0.5m in height (Card and Cluett 2005). This was constructed directly onto the till from a core of large boulders, faced internally and externally with fine masonry. Resistivity indicates that it runs NW-SE for c. 70m before returning NE-SW, and thus appears to bound the complex to the northwest. In 2007, Trenches M and N confirmed its continuation to the SW, and as in Trench J, it was sealed by Later Neolithic/Early Bronze Age material. In Trench N, a ditch, c. 2m wide by 0.5 deep, ran parallel to (and was contemporary with) the outside of the wall. A secondary wall increased its width to 6m at a later stage. A terminal exposed in Trench N suggested an entrance through the wall to the southwest. Four small incised stones (SF2642, SF2698, SF2745, SF2811) were recovered from the ditch fills in 2008.

Fieldwork in Trench J in 2006-07 revealed a stone building measuring c. 8m by 6m with radial divisions and an entrance passage to the SE. This building was contained by and concentric to the outer wall. Several phases of activity were identified including ephemeral wall lines, a rectangular stone setting, hearths and a triangular cist (Card et al. 2007). In 2006, two conjoining thin stone slabs, recovered from disturbed fill of this cist, were found to have incised geometric motifs (SF552, SF565). The following year, two further incised fragments of stone (SF736), were found in disturbed deposits unconnected to the cist but refitting with the fragments from 2006. An unstratified decorated stone (SF1727) was also found.

**The southeast enclosure wall**

Immediately to the southeast of Brodgar Farm is a 1940s bungalow, Lochview, which has two monoliths, presumably Neolithic, in its front garden. In 2009, Trench R was opened to examine a further large linear geophysical anomaly stretching across the southern part of the peninsula to the southwest of Lochview. The 10x2m trench revealed an almost 2m-wide double-faced wall abutting on its southeast by midden and rubble deposits containing Grooved ware pottery and stone and flint tools. Three incised stones (SF4739, SF4740, SF6801) were recovered from these rubble deposits. Underlying the rubble, at a depth of 1.5m, was a series of flagged surfaces abutting the exterior of the wall. The base of the wall was revealed at 1.7m, albeit constructed on top of earlier stonework. Several later structural elements were identified to the northwest. This wall is thought to be contemporary with the large walled boundary to the northwest; together these are assumed to have formed an ‘enclosure’ around the main structures (Nick Card, pers. comm.).

**Trench T**

At the southern end of the peninsula, and just outside of the southeast boundary wall is a large, partially quarried mound. Geophysical surveys indicate that the mound is surrounded by a revetted ditch (GSB Prospection Ltd 2002; Mackintosh and Damianoff 2003); these are associated with deep, anthropogenic Neolithic soils (Card and Cluett 2005; Cluett 2007).

Several artefacts, including a carved stone ball (Anonymous 1885) and an incised stone sinker (Noble 1888), were recovered from the mound in the 19th century. In 2013 (and 2014), Trench T was excavated across this mound and indicated that it was formed by a series of primary and redeposited midden-enhanced soil layers - possibly hundreds of discrete dumping events. A small, flaked and extensively incised stone was found within one of these (SF16381). Although later remodelled and partially terraced, the mound appears to be Neolithic and contains deeply buried structural remains (Nick Card pers. comm.).

**Post-Excavation Analysis**

Specialist environmental and artefactual analyses relating to the site are at an early stage. Only the results of the SmartFauna Project (Mainland et al. 2014, see below), which studied the spatial distribution of the animal bone deposit around Structure 10, are published.

By the end of the 2014 season, some 23,000 individual small finds, mainly Grooved ware sherds, had been recorded from the Ness of Brodgar excavations (Anne Mitchell, pers. comm.). Several exhibit decoration which is directly comparable to the motifs seen on the decorated stonework; this comparison may prove an important future research direction. In 2011, a clay object with vaguely anthropomorphic affinities was recovered from within the infill of Structure 14. In 2013, a carved stone ball (SF17596) - one of only a few to be found within a secure context in Orkney - was identified in a foundation deposit relating to the secondary modification of Structure 10. Large numbers of flint, polished and coarse stone artefacts have been recovered from the site1. This significant assemblage contains many imported and unusual polished stone artefacts, including at least six maceheads and 20 axes (Ann Clarke, pers. comm.).

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1 These are currently the subject of a Leverhulme Trust-funded project led by the University of York and entitled ‘Working Stone, Making Communities’ led by Mark Edmonds and undertaken by Hugo Anderson-Whymark, Ann Clarke and Antonia Thomas
Radiocarbon dates have recently been obtained from across the site for the *Times of Their Lives* Project (toll. eu), led by Alistair Whittle (Cardiff University) and Alex Bayliss (English Heritage). These are not yet published but where possible the preliminary results have been integrated into discussions of the site’s phasing and chronology. These add to the dates already obtained for the site by the BBC and as part of PhD research by Chelsea Budd, University of Oxford and Jonathan Cluett, University of Stirling (Nick Card pers. comm.).

**THE TRENCH P STRUCTURES**

Geophysical surveys across the peninsula indicate archaeological activity spread over an area of some 250x100m NW-SE (GSB Prospection Ltd 2002). Approximately 1100m² has been exposed by excavation in Trench P (Figure 98), and this has formed the main focus for archaeological investigation.

**Raw materials**

The architectural stonework on the site is almost exclusively formed from local sedimentary rocks. Broadly speaking, these derive from either Stromness or Rousay Flagstone formations, which weather to a soft orange or grey colour respectively (Chapter 3). In certain locations, particular types of flagstone appear to have been selected for their colour and used decoratively (e.g. wall 5151, Structure 1). Red and yellow Eday bed sandstones are less commonly employed, and tend to be used internally rather than in outer walling. Structure 12 in particular makes extensive use of very large quarried blocks of yellow sandstone, many of which are subsequently pick-dressed. This has a similar lithology to some of the stone used in Maeshowe and is believed to derive from Staneihill, around 4km away (Richards et al. 2013, 124). Nineteen dressed pieces of red sandstone have also been recorded: 13 in Structure 10, two in Structure 8 and four in Structure 12; many more unworked red sandstone fragments have been found, also concentrated in Structure 10. This indicates that the raw material was brought to the site for finishing, and that dressing was either taking place during construction, or that pieces were broken up from other, earlier structures. The nearest source is at Houton, Orphir, meaning that it was quarried and transported from at least 12km away (Martha Johnson, pers. comm.).

Certain raw materials are associated with particular forms of working, with percussive working such as pecking and pick-dressing predominantly found on the Eday bed
sandstones, whilst laminar flagstone tends to be used for incising and carving. The affordances of particular raw materials and their relationship to particular ways of working will be explored in more detail in Chapter 7.

**Masonry**

Across the site the buildings are built from fine drystone masonry, but there is considerable variation in the method of construction. Some of the larger buildings are double-skinned (e.g. Structure 8), whilst others (e.g. Structure 12) have two walls: an inner double-faced wall and an outer revetment with a midden/rubble core. These are described in more detail in relation to the individual structures. There are also notable differences in the style and materials seen in the external and internal walling across Trench P (Figure 99).

In Structures 1 and 8, the outer walling is markedly rubbly in comparison with the fine internal coursing. The focus is clearly on the interior with less concern afforded to the external appearance. The level of Structure 10’s preservation means that the only area of walling where the internal and external faces can be directly compared is in the forecourt, which was constructed as part of a later phase. However, overall the outer walling of
Figure 99. Sample elevations of the main Trench P structures. Image © Antonia Thomas.
Structure 10 is rather different in character from the exterior of Structures 1 and 8 (and the other buildings except 12) in the size of its stones and style of build. In extending for nearly 20m, the neat external walls of 1251 and 1306 would have presented an imposing exterior. The contrast between the internal and external stonework is most marked, however, with Structure 12. Whilst the exterior uses a range of sizes of stone, these tend to be of average size and are predominantly flagstone. Substantially larger stones, and frequently pick-dressed yellow sandstones, are used inside. As in Structure 10, these are sometimes subsequently chiselled - a technique that has only otherwise been recorded at Maeshowe.

Structures 10 and 12 in particular would have inspired awe through the size and quality of their stonework. Inherent within the appreciation of this stonework would be an understanding of the large scale performative acts of quarrying, transportation, construction and working of the raw materials. In the primary creation of Structure 10 and 12, the focus appears to be on the procurement of large and unusual materials, and the use of labour-intensive quarrying, transportation and masonry techniques. This is truly an example of ‘conspicuous construction’ (cf. P. Thomas 1998).

This appearance of grandeur is, however, superficial. Both 10 and 12 (and indeed 8) were built on top of earlier structures which had not been entirely levelled, and which caused significant settlement in the superimposed buildings. Each of these structures suffered at least partial collapse and required significant renovation and rebuilding throughout their occupation. Despite the use of fine materials and masonry techniques, at times the site would have appeared messy and chaotic. Although there would have been periods of relative stability and calm, this was a construction site in constant flux, as buildings were in a near continuous state of build, demolition / collapse and rebuild. The implications of the longer-term processes of construction on the site will be discussed in Chapter 7; the main structures in Trench P are presented below.

**Structure 1**

Situated in the western corner of Trench P, Structure 1 appears relatively early in the sequence of the main complex, and in contrast to many of the other structures (which were often built over earlier buildings), was built directly onto levelling layers. It is oriented almost exactly north-south, and in terms of its size and double-cruciform arrangement (Figure 100), is similar to House 2 at Barnhouse. Unlike House 2, however, in its primary incarnation, Structure 1 had 2 entrances: one at the west side of its northern end, and one at the eastern side of the southern end. Externally, it is nearly 15x10m and was constructed from a double wall of drystone masonry measuring over 2m in width. The outer skin was battered and would have given the building a domed profile. Internally and externally, the majority of the stone used in the walling is flagstone, although yellow sandstones, frequently pick-dressed, were used internally in the central piers and the corners of buttresses. In its primary phase, there were two hearths in use in Structure 1, in the northern and southern halves of the interior. In common with other Later Neolithic houses in Orkney (Richards 1990), whether entering the building from the north or the south, movement is directed to the right of the respective hearth.

To the south of Structure 1 is an open, paved area centred upon a large monolith 3682 (0.79x0.15m and >0.75m high). This is directly opposite and on the same N-S alignment as the south entrance of Structure 1. The paved area led towards the intramural passage to the northeast (see below).

**Later modifications**

At a later stage, the central side walling was partly dismantled back to piers 1068 and 1080 and new entrance was inserted into the eastern wall. A large arc of walling 1224 was also constructed across the northern end, reducing the internal space by two-fifths. This created a room reminiscent in size and style of the house at Crossiecrown (Jones et al. 2010). At the same time, a monolithic orthostat 1024 was forcibly inserted into the middle of the northern hearth (Figure 101), rendering this fundamental element both physically and symbolically redundant. It is not keyed into wall 1224 and offers no structural support, but indicates the dramatic and deliberate change in the internal space brought by this phase of modification. The symbolism of this act is reinforced by the crude pecking on the stone’s western face (SF11546), and reflects the trend seen across the site for cup-marked and pecked stones to be associated with acts of change and transformation (Card and Thomas 2012, 120).

The insertion of this orthostat emphasises the reorientation of space effected by the construction of wall 1224. Its position reflects that of buttress 1046, itself encased by orthostats, which projects from the southernmost internal wall immediately to the west of the south entrance. The insertion of wall 1224 turns the internal space of Structure 1 from a N-S oriented room whose length was almost double its width, into a room whose maximum internal dimensions are now exactly 6.6m E-W and N-S. This is not square however, but continues to draw upon the double-cruiform layout seen previously. The pairing of these orthostatic features divide the space along the E-W axis in much the same way as the central piers do on the N-S axis of the earlier phase. At broadly the same time that wall 1224 was inserted, the southernmost entrance was blocked.
In effecting these modifications, therefore, the spatial organisation of Structure 1 has been rotated 90°. The attention has shifted to the east entrance and movement is now channelled in an E-W direction through the structure, realigning the focus to Structure 7/19 to the east (see below).

During a tertiary phase of occupation the southern hearth was enclosed by a semi-circular structure; this appears to have taken place rather late on in the sequence on the site, possibly after a period of decommissioning of the rest of Structure 1.

**Decorated and dressed stonework in Structure 1**

Ninety-eight decorated and dressed stones have been recorded from Structure 1 up to and including 2013. Discounting indeterminate markings leaves a total of 85 deliberately decorated or dressed stones, by far the highest concentration on the site. The walls of Structure 1 survive, and have been exposed to, a height of >1m and 75 decorated or dressed stones were recorded within *in situ* structural contexts. Externally these are mainly concentrated around the south entrance (Figure 102); internally the south entrance area, southwest corner buttress and central piers see the densest decoration. In common with the other structures, incised designs predominate with chevrons the most common motif recorded. These are discussed in more detail below.

**The intramural passage**

Running outside of the east and southeast sides of Structure 1 is the only passage which is comparable to those at Skara Brae. It survives up to 11.5m in length and 0.4-0.75m in height. It started life as a stone-lined drain, which was capped with flagstones 2155, and which subsequently became the paving for the intramural passage. One of the capstones was extensively incised on its upper surface (SF15920). The passage formed the main access for Structures 1 (in its secondary phase), 11 and 19. During a later phase, the southern part of the passage between Structures 1 and 11 was filled with a mass rubble layer 1233 bounded with large blocks at either end and access from the area to the south of Structure 1 was cut off. The passage wall 1018 is heavily decorated, but passage blocking 1233 did not extend as far as the main concentration of markings and these may instead relate to a late phase of use in this area. The implications of this sequence of blocking for the distribution of carvings in the intramural passage will be discussed further in Chapter 8. After the southern part of the passage was blocked, access to Structure 11 from the north was maintained for a time, until this too was blocked with rubble.

**Structure 19**

Structure 19, to the east of Structure 1, appears to have been contemporary with its secondary modifications and the
Figure 101. Orthostat 1024 inserted into the primary hearth of Structure 1. Image © ORCA.

Figure 102. Structure 1’s south entrance. Image © ORCA.
construction of the intramural passage. This finds a parallel at Barnhouse, where House 2’s single entrance in its SE side faced the doorway of a smaller structure, House 9, across a narrow paved passage covering a drain (Richards 2005c, 129). Structure 19 directly underlies Structure 7 (see below) and in its primary form comprised a sub-circular space measuring approximately 4.5x5.5m. This was bounded by walling to the west, parts of Structure 11 to the south, and the ruinous remains of Structure 8 to the east. There is no evidence that a north wall ever existed (Daniel Lee, pers. comm.). Outer wall 3706 abutted entrance upright 2600 (with an incised filled chevron motif, SF15624) and then curved round to the east. Internally, it was flanked by wall 3752, which formed the rear wall of the chamber. The silty core of this wall sealed a foundation deposit (FD3763) of animal bone, a foreign stone and a small, flaked, incised stone (SF18069). Activity in Structure 19 was organised around its large, square, stone-lined central hearth, which directly overlie Structure 7's hearth. During its primary phase, a stone-built oven occupied the northwest corner of Structure 19. This had a substantial double-skinned and curved wall enclosing a small flagged 1m² chamber containing a spread of burnt stones. The rear wall of the chamber was also heat-affected around a flue which led out from the lower part of this wall.

Structure 7

Structure 19’s outer wall 3706 was partially demolished for the construction of 1004, which became the main west wall of Structure 7. This abutted the entrance orthostat 2600, which continued in use. Wall 1004 curved round to the east to abut the remains of Structure 8; six decorated stones were recorded during its dismantling. Several of these were not visible once the wall was built and it appears that these were actually incised during construction. This is discussed in more detail in Chapter 7. Three flat slabs, similar to the ‘roof slates’ found elsewhere on site were incorporated within the later occupation and levelling floor layers and may be derived from the ruins of the adjacent Structure 8. Each of these - SF3940 and SF4030 (from 1414) and SF4718 (from 1346) - had incised motifs on its upper surface. If these were re-used, it seems that they were only decorated when they became incorporated into Structure 7; of the 400+ roof slates recovered from Structure 8, only one (SF7710) was noted as decorated. This is discussed further in Chapter 9. A large ‘perching stone’ (2020) to the east of the hearth, was also found to have incised lines on its west facing side (SF13950).

Industrial activity to the S of House 7

To the south of Structure 7, and contemporary with the earlier activity around the hearth, was a stone-lined oven 3221, which still contained a spread of burnt stones upon excavation. Removal of wall 1004 adjacent to Structure 8’s wall 1326 exposed a possible kiln base in the form of a discrete deposit of heat-affected clay and highlights the industrial use of Structure 7 during its early phases.

Figure 103. Structure 7 under excavation in 2011. Image © ORCA.
Stratigraphically, the kiln and oven appear to be contemporary, and abut the later annexe of Structure 12. Along with the northwest oven in Structure 19, they indicate varied and intensive industrial use of this area. This industrial function might explain why both Structures 19 and 7 appear to have remained unroofed throughout their life (Daniel Lee, pers. comm.), and perhaps served as sheltered working areas, as suggested for House 11 at Skara Brae (Clarke 1976a, 17).

**Structure 11**

In its earliest phase, Structure 11 was broadly contemporary with, and possibly ancillary to, Structure 19 to the north. It is an irregularly shaped building formed by two perpendicular walls 1097 and 1199 forming a corner to the south, with an arc of walling leading off to form the southeast boundary of the intramural passage. The internal space is approximately 3.25x2m and orientated NWW-SSE; it was entered from the intramural passage through a narrow doorway leading into the northwest of the room. This was bounded by notched slabs, suggesting it was lockable (Daniel Lee, pers. comm.). The northwest-southeast walling of 1097 incorporated a large orthostat with a c. 15 cm sub-circular hole in its upper edge, similar to those seen bounding the recesses in Structure 8. To the northwest of this is a small recess which contained a stone ball (SF8305). Despite its small size, 19 decorated stones were recorded from Structure 11 up to 2013. These are predominantly incised. Ten of these were in situ within internal wall-faces and would have been visible during occupation. In 2014, the partial dismantling of external walls 1199 and 4411 led to the discovery of four ‘hidden’ stones (Chapter 7). At a later phase, Structure 11 was rebuilt and constructed on top of the midden-enhanced soils which filled this area (presumably after the collapse of Structure 8). It appears to have continued in use until the later phases of activity in this area before it was itself infilled with deep midden-enhanced deposits.

**Structure 8**

Structure 8 occupies the northeast part of Trench P, to the east of Structures 1 and 19, and the northwest of Structure 10. It was built on the remains of two earlier sub-circular buildings: Structure 17 in the SSW area, and Structure 18 underlying the NNE end. These have not yet been fully exposed, but parts of Structure 17 seem to have continued in use in the overlying Structure 8, for example wall 3065, which was re-used as bench in the later building. This contained an incised stone (SF11570). From the limited remains which have been exposed, it appears that Structure 18 measured approximately 10.5m in length and was oriented NW-SE. The superimposition of Structure 8 on these earlier buildings caused the main structural walls to subside, and may have ultimately led to its demise (see below). Despite its collapse, and significant truncation and robbing along its south and east sides, Structure 8 has survived as a sub-rectangular structure oriented NNE-SSW, measuring approximately 18m by 9.5m externally.

**Spatial organisation**

In its primary phase, the internal spatial layout of Structure 8 was divided by up to five sets of internal opposing piers projecting into the central area from the main walls. These form a series of recesses bounded by orthostats; one of these has two sub-circular ‘portholes’ cut into it at floor level. A significant assemblage of unusual artefacts has been recovered from the primary floor levels in the recesses including polished stone spatulas, polished ‘cushion’ stones, a whale tooth, a whalebone macehead and collections of bovid astragali.

The use of masonry piers is relatively rare in Neolithic Orkney. With the exception of Structure 2 at Barnhouse, and the buildings at the Ness of Brodgar, piers have only otherwise been recorded in House 5 at the Braes of Ha’Breck, Wyre (Lee and Thomas 2012). Like the internal buttresses in Maeshowe, these do not serve a functional purpose; the downward thrust caused by the weight of the walls and the roof would necessitate external, rather than internal piers. The sole identified entrance to Structure 8 is in its northern end, although excavation may yet reveal an equivalent in the southern end. However, it remains significant that (in contrast to Structure 12, for example) there are no openings in either of the long structural walls, and movement would thus have been from one end of the building to the other. This linearity would have been enhanced by the piers, which would have effectively channelled movement through a series of distinct spaces. This mirrors the division of space seen within Orkney-Cromarty (stalled) cairns, which has been argued to represent a series of symbolic ‘doorways’ (Richards 1992). Colin Richards argued that progression through these ‘doorways’ makes the movement through the tomb take on the form of a transformative journey (op. cit., 73). Although the spatial division formed by the piers is less dramatic than that seen in stalled cairns, the allusion to historical funerary architecture is likely to have been apparent to both the builders and users of this space. A more orthostatic style of architecture is further referenced by the fact that the position of the piers appears to have been specifically marked during construction with upright stones inserted into the main structural walls.

Structure 8 has only seen limited excavation, making the identification of subtle phasing difficult. It appears that the north end in particular saw modification fairly soon after the primary construction. Orthostatic divisions were inserted late on in the primary stages of the build; in the top course on the end of pier 1009, one of these obscured a cup-marked stone.
The Brodgar Stone

When it was discovered in the 1920s, the Brodgar Stone was thought to have derived from one of several ‘cists’ (J.G. Marwick 1926, see Prologue). Anna Ritchie noted its similarity to a building stone rather than cist slab and suggested that it may have been moved from Barnhouse (Ritchie 1995, 69), whilst Elizabeth Shee Twohig commented that it may have been ‘re-used from a passage grave or settlement site’ (Shee Twohig 1997, 385). In 2009, its likely original position was identified during excavation of the north end of Structure 8. At the base of a modern robbing pit, in a part of the building dominated by cist-like orthostatic divisions, a rectangular, vertically-sided empty cut of similar dimensions to the Brodgar Stone. Although their location is not now known, three large rounded hammerstones were found in 1924 along with the decorated slab. In both their size and shape they are remarkably similar to the groupings of similar stones found within the recesses of Structure 8 during excavation. This strongly suggests that the Brodgar Stone came from this area of Structure 8, or more probably, the underlying Structure 18.

The end of the building

The end of Structure 8’s occupation is marked by what appears to have been a catastrophic structural collapse. An extensive layer of rubble, comprised mainly of 400+ trimmed slabs, covering the whole of the interior, lies immediately above the occupation deposits (Figure 104). These slabs are reasonably uniform in size and shape and have been interpreted as slates, ‘similar to [those on] flagged roofs that can still be seen in Orkney today’ (Card et al. 2013, 13). They are the first roof slates to be identified in the British Neolithic. One of these, SF7710, was found to have a faintly incised opposed-fan motif on one side. Following its apparent collapse, Structure 8 was partly demolished to allow for the construction of Structure 10, which truncated the earlier building’s eastern wall. A triangular block of red sandstone with a design of two triangles raised in bas relief (SF15961) was found amongst these demolition deposits, close to SF16138, a sandstone block with a large pecked circle on one face. Both of these are unique on the site.

Decorated and dressed stone in Structure 8

Compared to the other areas of the site, and despite its level of preservation and size, Structure 8 has relatively few examples of decorated stones, with only 39 examples recorded (excluding six indeterminate examples). This might be explained by its relative short life-span prior to its collapse. Incised markings predominate, often forming banded motifs comparable to those seen on the Brodgar Stone. In 2015, a particularly fine example was found within wall 3079; this would not have been visible after construction. Incised, pecked and carved markings tend to be concentrated around the piers, rather than on the rear walls of recesses. In 2010, an orthostat (2210) with yellow,
6. The Ness of Brodgar

red and brown pigment on its upper edge was exposed in the robber cut thought to relate to the Brodgar Stone at the northeast end. It was removed in two pieces (SF11033, SF11034). A further coloured stone (SF8252) was recorded placed centrally within the recess to the north of pier 1230. These are currently awaiting full conservation and analysis.

Structure 12

Structure 12 (Figure 105) is a substantial NNE-SSW sub-rectangular building in the southwest of Trench P. This area had previously been occupied by at least three sub-oval structures, which were partially levelled before Structure 12 was built. Structure 23 was a NW-SE oriented building, the southwest wall of which was later incorporated into the forecourt of Structure 12. Structure 24, oriented ESE-WSW and located to the south was partly used as a foundation for the internal wall-face of Structure 12. The area between the northeast wall of Structure 24 and the southwest wall of Structure 23 may have originally formed a passage which narrowed towards the east. A further building is evidenced by a stretch of east-west walling which runs across the south end of Structure 12.

Construction

Although comparable in overall size to Structure 1, the size of the masonry used in the build of Structure 12 represents a dramatic departure from that seen elsewhere on the site. Structure 12 is built from an outer wall, with an outer face and a rubble core, which surrounds an inner, double-faced wall with a midden and rubble core. Overall these form 2m-wide walls which survive to over 1m in height and which were at least partially surrounded with paving. In its initial phase it measured c. 15.5x11m externally (excluding the forecourt: see below), with a large (c. 11.5x7.5m) internal space. It incorporates a substantial number of large yellow sandstones in its build; these are frequently pick-dressed.

Spatial organisation and layout

The sub-rectangular interior is divided into two main areas by a pair of central projecting piers (Figure 105). Two further pairs of piers are found at either end of the internal space. The piers incorporate large pick-dressed sandstones in their south corners, indicating that they were meant to be appreciated from the south entrance (Chapter 7). Each half of the interior contained a large stone-lined hearth. The southernmost of these was associated with a large spread of cattle bone in its later phase and included an extensively incised orthostat (SF18529).

In its primary phase it seems that Structure 12 was accessed through two offset entrances: one in its south corner and a further one in the northwest corner. In 2014, a further entrance was revealed in the east wall. It is not yet clear whether this was original, or represents a later

Figure 105. Structure 12 under excavation in 2014. Image © Hugo Anderson-Whymark.
modification, but it appears to be a far more prominent and grander entry than the corner openings mentioned above. It was flanked by orthostats and perhaps significantly, faced Maeshowe. The south entrance was blocked up during a later phase; the lowest course of this blocking contained decorated stone SF17473, a rare example of a curvilinear pecked design from the site. Primary floor levels have not yet been investigated.

**Subsidence, instability and secondary modifications**

As with Structures 8 and 10, the construction of 12 over the remains of earlier buildings caused significant settlement and partial collapse in the south end of the building. This was followed by various stages of internal remodelling, which would have necessitated complete re-roofing (Jim Rylatt, pers. comm.). Contemporary modifications are evidenced by the blocking of the south and northwest entrances, the rebuild of the south wall, and possibly the insertion of the east entrance, which may have been contemporary with the insertion of the east entrance in Structure 1 (see above). At the same time, the ends of the northernmost piers were rebuilt, and the north entrance was inserted as part of the creation of the forecourt area.

**The end of the main building**

In the central part of the interior, a substantial deposit of pitched and embedded rubble overlying the occupation levels appears to indicate a second phase of collapse at the end of Structure 12’s life. It then appears to have been deliberately dismantled/demolished. A substantial layer of rubble, including trimmed slabs similar to those interpreted as roof slates in Structure 8, lay immediately above the occupation deposits. As in Structure 8, these were mixed with a yellow clay, probably caulking material. The main internal space was then filled with midden-enhanced soil layers which represent a complex sequence of dumping events.

**Robbing**

The ESE side of Structure 12 was heavily truncated by later stone robbing, which post-dates the infilling of this building with midden material. This completely removed the internal wall of Structure 12 (walls 2328 and 2305), the ‘ghost’ of which was preserved by a 0.7m wide vertical edge (as in Structure 10; see below). The central pier on the ESE side was almost completely robbed out. The upper fill 2803 of this robbing cut contained several decorated and dressed stones.

**Forecourt**

The entrance into the forecourt appears to have continued in use for some time after the rest of the structure was ruinous, as the step into the forecourt was sealed by one of the midden dumps filling the main part of Structure 12. This area is characterised by a striking number of structured deposits of artefacts which were sealed by the rubble and midden infilling this area. These include two whole, upright Grooved ware pots and several other large sherdsof pottery; hammerstones and a polished macehead fragment (SF10912). They can be interpreted as closing deposits related to decommissioning rites at the end of the building’s life. At this time, the northernmost entrance in the forecourt was also blocked. A series of flat slabs, which were profusely decorated with incised and carved designs formed the base of this blocking; three of these slabs refitted (SF16189; SF16190; SF18521). These had been laid facing different directions, suggesting that the stone, originally one large orthostat, had been deliberately broken (Figure 106); the hinge fracture forming the break suggests that this was done with considerable force (Thomas 2014b, 21).

**Decorated and dressed stonework in Structure 12**

As discussed above, the internal stonework in the main body of Structure 12 is characterised by the use of substantial, pick-dressed yellow sandstones. It is also the only building (with the exception of one stone from Structure 10) which has evidence of chiselled stones. Four examples are in situ in the ends of piers, with a further three within rubble deposits. In each case the chiselling overlies pick-dressing. Externally the stonework is predominantly flagstone. Although the full extent of these walls has not yet been revealed, several of these also have incised motifs.

A concentration of crudely-pecked cup-marked stones around the southwest external walling (2807 and 2830) relates to a phase of rebuild in this area (Jim Rylatt, pers. comm.). As in other areas of the site, there appears to be a direct correlation between episodes of structural reworking and the placement of cup-marked stones.

Although rare in the main part of the building, there is a significant concentration of in situ decorated stones in the forecourt, and many of the stones in the re-used walls of Structures 23 and 24 are incised. Several of these were discovered when the walls were partly dismantled and would have been hidden during the occupation of this area. The decoration on the ‘visible’ stones appears to relate to Structures 23 and 24 rather than the Structure 12 phase of activity.

The forecourt area is particularly notable, however, for its association with the opposed-fan motif (known colloquially as ‘the Brodgar butterfly’: Figure 117). Although found in other buildings, it is the placement of several large slabs as part of the final blocking and decommissioning of the northeast entrance in the forecourt which provides the most dramatic example (Figure 106). Further slabs with a similar motif were
found in association with the blocking stones (SF16252), and in disturbed upper walling in the forecourt (SF7146). A stone with natural markings resembling an opposed-fan motif (SF17482) was incorporated into the remodelled northwest pier to the west of the north entrance. The entrance step into the forecourt concealed both this stone, and a boulder with a similar natural marking (no SF assigned). Given the predominance of this motif on deliberately marked stones in this area, the incorporation of similar, albeit natural stones, is highly significant and will be discussed further in Chapter 9.

**Structure 10**

Before the construction of Structure 10, the area to the east of Structure 8 in Trench P appears to have been occupied by several large buildings. These have been exposed in voids and cuts throughout Structure 10, most clearly underneath the central hearth and in the northwest corner. The remains of an early hearth are visible at the base of orthostat cuts in the east end of the interior, whilst earlier walling (Structure 20) was exposed in the forecourt and in the east entrance.

**Construction**

The construction of Structure 10 took place very soon after the collapse of Structure 8, and also appears to have involved the partial demolition and robbing of the collapsed building. Several large, almost monolith-sized, stones were incorporated into the lowest levels of Structure 10 and into the outer skin of walling, which had stepped-out foundation courses. It was built from two concentric drystone walls, each c. 2m thick and separated by a midden core up to 1m in width. Despite the systematic robbing of the stonework, in places it has survived to almost a metre in height. The main structure was surrounded by a c. 1m wide paved intramural ‘pathway’ that was revetted by a single faced wall with midden backing. The build of Structure 10 compares well to that seen in House 8 at Barnhouse and at Maeshowe, where the concentric walling has been interpreted as a form of symbolic ‘wrapping’ (Downes et al. 2013, 117). As with Structures 8 and 12, Structure 10 appears to have suffered from subsidence during its main phase of use due to the settlement of walling and deposits over the earlier structures. This may have necessitated the modifications to the internal space, which appear to have happened relatively soon after the initial construction.

**Scale**

In terms of its overall footprint, Structure 10 is by far the largest building in the complex. Although not fully exposed, it is at least 16m² externally (c. 16x20m including its forecourt) - but once inside, the internal...
space was only 7.5m² in its primary form. This creates a striking disjuncture between outside appearance and inside experience as the massive scale of the exterior would have contrasted with the restricted visibility once inside. This would have been enhanced by the secondary modifications, which comprised the simultaneous reduction of the internal space and aggrandisement of the exterior. Entry and movement into Structure 10 was further choreographed by its spatial layout.

**Spatial organisation**

The appearance of Structure 10 on the site marks a departure from the linear spatial organisation seen in Structure 8, and to a lesser extent in Structure 12. Significantly, it may be the only building with only one entrance/exit: access to, and movement within, the interior is controlled rather differently than in the other structures on the site. In its primary phase, Structure 10 comprised a rounded rectangular chamber, oriented directly east-west (Figure 107). The form of the original entrance is not entirely clear, but in 2014, the threshold slab for the entrance was revealed, and comprised a flaked edge slab over 1m wide. In its secondary phase, movement would have been considerably restricted by the walls and orthostats — many of which are decorated — which divide the internal space. Immediately lit up and visible upon entry, however, would have been the dresser at the rear (westernmost end) of the room (Figure 108).

In its layout, its single, central hearth, and the inclusion of a dresser, Structure 10 is in many ways typical of Later Neolithic houses in Orkney (Richards 1990). In its internal organisation and size it is strikingly similar to House 7 at Skara Brae, but its monumental appearance bears most resemblance to House 8 at Barnhouse (Chapter 3). In contrast with both those structures however, the eastern side of Structure 10 leads onto a forecourt area. This includes a substantial monolith 1332, which has a drilled perforation in its southern face. A sandstone block with a line series of small pecked and ground cups along one edge (SF11504) was hidden within the construction cut for this monolith. Although this was interpreted as original, it is possible that it was inserted during the remodelling in this area.

In the southwest corner, two large, extensively decorated and dressed blocks (SF16258 and SF16354) were found which may have formed original corner stones for the

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*Figure 107. Structure 10 during excavation in 2010. Looking W. Image © ORCA.*
Figure 108. The dresser at the western end of Structure 10, with its central pillar of pick-dressed red sandstone. Looking W. Image © ORCA.

Figure 109. Large decorated stones SF16258 and SF16354 in situ during excavation of the SW corner buttress in 2013. Looking S. Image © Antonia Thomas.
Phase 1 construction (Figure 108). Several pick-dressed sandstones with curving, concave faces (e.g. SF3624) have also been found within the robbing cuts for Structure 10. These may have formed part of the internal corners, similar to House 7 at Skara Brae, but the discovery of several of these within the wall-core in 2015 suggests that their visibility was not consistently important. They may have been re-used, from an earlier, as yet unidentified, structure on the site, or their incorporation within the heart of the building’s walls may indicate other concerns.

**Secondary modifications**

In the secondary phase of alteration to Structure 10, corner buttresses were built, transforming the internal rounded square shape to a cruciform layout with recesses on the north, east, south and west sides significantly reducing the internal floor space. In the southwest corner, decorated blocks SF16258 and SF16354 (Figure 109) were incorporated into the base of pier 4338. A large extensively decorated slab formed of two refitting pieces (SF16861 and SF16868) was found abutting block SF16258. With Finds Deposit 4382, comprising an assemblage of a small axe, decorated pottery, animal bone and foreign stone, these decorated slabs can be interpreted as a foundation deposit for the southwest pier. As such they compare to both SB14_097 from Skara Brae, but the discovery of several in situ grinding mortars (SF8341, SF8836 and SF9855) in association with haematite, ochre and galena deposits. Two grinding mortars, SF4308 and SF6376, were recovered from demolition layers near this corner. Although functional objects, their appearance and form of working is strikingly similar to some of the cup-marked stones found in Structure 10. This association is further strengthened by the presence of a line of non-functional - crudely pecked cups along the edge of SF4308. The link between ‘functional’ and ‘decorative’ stones is discussed in Chapter 8.

**The NW corner**

Towards the end of this phase, the northwest internal corner saw a further stage of modification. Although the exact sequence is unclear, it seems that this corner formed the focus for the production of pigments at this time. Several pick-dressed stones were re-used to form secondary walling for a small corner cell containing several cup-and-ring pecked stone SF3133, and other unusual artefacts such as bone beads and axe blanks, appear to have been deliberately incorporated within rubble 1239. The process of working and depositing decorated stones. This will be discussed further in Chapter 7.

**The end of the building: demolition and decommissioning**

At the end of its occupation, Structure 10 was subject to a series of significant decommissioning rites. A complete Grooved ware pot was placed within pit/post-hole 2441; this also contained a cow scapula. At the same time, a heavy (>35kg) block of stone bearing several crude cupmarks (SF7407) was placed in the centre of the heart next to an inverted cattle skull (SF7228). Stratigraphically, the placement of this cup-marked stone and the cow skull mark the interface between the end of the occupation and the first midden-enhanced soil which sealed the interior (Card et al. 2011, 57; Card and Thomas 2012, 119).

Their placement signalled the start of a sequence of deliberate demolition and infilling of the interior with a series of rubble spreads, themselves overlain with deposits of animal bone and midden-enhanced soil layers. These were sealed by a further, extensive rubble spread 1239 which would have effectively created a large cairn of stones. Indeed, the events which marked the end of the ‘life’ of Structure 10 can be likened to burial rites (Chapter 7). Several decorated stones, including the cup-and-ring pecked stone SF3133, and other unusual artefacts such as bone beads and axe blanks, appear to have been deliberately incorporated within rubble 1239. The primary rubble layers filling the forecourt area also
6. The Ness of Brodgar

Figure 110. Cup-marked stones SF6136 and SF6137 adjacent to standing stone 1332. Looking NE. Image © ORCA.

Figure 111. Cup-marked stone SF7530, incorporated within secondary walling by the entrance. Looking NE. Image © ORCA.
contained a number of fragments of human skull and jawbone (Nick Card, pers. comm.).

The intramural pathway which surrounded the outer wall of Structure 10 was subsequently filled with a series of rubble and soil deposits, the uppermost of which was a thick layer of rapidly-deposited animal bone. Extrapolation from the excavated areas suggests that the entire deposit surrounding Structure 10 represents in excess of 400 individual cattle (Mainland et al. 2014, 876). The assemblage comprises cattle tibiae piled up against centrally-placed cattle skulls; in at least two places articulated deer carcasses were placed on these deposits (op. cit., 874). This sequence of extraordinary, and likely performative, decommissioning and demolition events mark not only the end of Structure 10 (op. cit., 869), but also the end of the main phase of occupation of what is known of the Trench P structures. The performative aspects of Structure 10’s decommissioning and demolition are explored in Chapters 7 and 8.

Abandonment and robbing

Structure 10 then appears to have been robbed in a very particular manner, which I previously described as ‘structured robbing’ (Card et al. 2011, 42). Certain areas appear to have been differentially robbed, whilst the incorporation of artefacts – including decorated stones - within the robbing backfill is suggestive of considered placement rather than residual deposition. The relative timescale and sequence of the demolition and robbing events is not clear, but the vertical edges of the robbing cut indicates that the midden deposits built up whilst the walls were still in situ and settled for long enough to become compact prior to the robbing. It seems likely that the mass of animal bone encircling Structure 10 would have still been visible when its stonework was robbed. This leaves us with the question of where the robbed stone went. There may be other, as yet unrevealed, structures in the complex for which activity continued for some time (Mainland et al. 2014, 869).

Decorated and dressed stone in Structure 10

In addition to the cup-marked stones mentioned above, Structure 10 is distinctive for the number of pick-dressed sandstones, and in particular red sandstones, found both in situ and within demolition deposits. The internal space would have been strikingly different in appearance to most contemporary buildings in terms of both its colourful appearance and finely dressed stonework. The 13 examples of pick-dressed red sandstone from Structure 10 include seven fragments which were broken up after dressing. Four of these were contained within the wall-core for the main walling in Structure 10, indicating that dressing was taking place whilst the building was being constructed. In 2014 and 2015, further red or yellow pick-dressed sandstones were recovered from early layers in Structure 10, including from within the wall-core. With the exception of the cell in the forecourt, however, relatively few incised stones have been recovered. These are discussed in more detail below.

Structure 14

In 2011 a further large NE-SW oriented building (Structure 14) was exposed in the north of the trench, to the northeast of and partly cut into and constructed against soil deposits abutting Structure 1. Several foundation deposits were sealed beneath the primary floor and include a polished igneous stone and gneiss axe. The walls have a rubble core between internal and external faced masonry, which survives up to five courses in places. A small incised fragment of stone (SF8633) was recovered from the wall-core of the main southeast wall 1033 and may have been deliberately inserted during construction (Chapter 7). In 2014, a sherd of Carinated Bowl was found pressed into the glacial till underlying the floor layers in the interior. This was separated from the use of Structure 14 by intervening midden deposits and earlier structural remains.

Layout and spatial organisation

In appearance, Structure 14 presents a slightly smaller and less well-preserved version of Structure 1, and is strikingly similar to House 2 at Barnhouse. It is oval in overall plan and with a double-cruciform interior measuring approximately 8.65m x 5.73m internally. These are original features of the building, but the south entrance was later re-built and narrowed and the east entrance was narrowed and subsequently blocked. Each side of the structure has a small corner niche to the west, and two large recesses. It is oriented ENE-WSW with two entrances, in the northeast end and the southeast side. Although the northeast end of the interior has corner buttresses as Structure 1, these are replaced by piers in the southwest end to allow for a cell in the southwest corner and a small entrance in the southeast. The entrance to the northwest recess appears to have seen particularly intensive activity and was re-paved on at least two occasions (Hugo Anderson-Whymark, pers. comm.). As in Structure 1, each half of the interior has its own centrally-placed hearth.

Structure 14 use and modification

The three entrances appear to existed in the earlier phase, along with various orthostatic divisions and furniture, including a linear arrangement in the northeast recess and an orthostat south of the east hearth. A further line of orthostats formed a screen across the rear (SW) recess, and would have dominated the view from the northeast entrance rather like a dresser. These divisions were added to during this first phase of activity and the west hearth...
appears to have been re-set early on in the life of the building. A small piece of polished mudstone SF17700 was found in association with painted pottery SF17680 on an early floor level in the northeast of the interior. Possibly a broken pendant, this artefact has incised markings on both sides forming chevrons, zigzags and a faint cross-and-lozenge design, and is a rare example of a portable decorated stone from the site. A secondary phase included the removal of some orthostatic fixtures (e.g. in the northeast recess), the rebuilding and narrowing of the south entrance, the modification of the east entrance and the laying of a distinctive yellow clay floor. In the northwest area, earlier deposits were truncated to create a level surface for the new floors. There are noticeable differences throughout the interior, with the northwest recess containing occupation layers including a burnt stone spread, whilst the southwest recess was entirely clean.

Decommissioning and demolition

At the end of its ‘life’ Structure 14 also appears to have been decommissioned and filled with midden-enhanced soils and demolition debris. A series of ‘abandonment’ deposits mark the start of this sequence. These include the placement of a polished igneous stone SF15037, on top of a finely-incised flagstone slab SF15036, within a scoop in the floor near the southeast corner buttress (Chapter 7).

Following the deposition of the closing deposits, a layer of stone rubble accumulated directly over the floor deposits and Structure 14 was comprehensively dismantled. No ‘roof slates’ comparable to those from Structure 8, or any other possible roofing materials were recovered within or around the building. The south walls were reduced to their lower courses and the north walls to their foundations. After dismantling, Structure 14 would have appeared as an irregular rubble surface with small projecting areas of walling. This was then sealed with significant amounts of midden-enhanced soil deposits.

External features

A paved walkway spanned the area to the south of Structure 14 around the outside of wall 1150 (Structure 16), demonstrating that both buildings are broadly contemporary (see below). After Structure 14 was demolished and infilled with midden deposits, the exterior north wall was robbed, a series of pits were cut and Structure 22 was built to the northeast.

Decorated and dressed stone in Structure 14

In addition to those mentioned above, relatively few decorated stones have been recovered from Structure 14. Only eleven certain examples overall have been recorded (with three further indeterminate ones). This low number is due to both its recent exposure in the

Figure 112. Structure 14 under excavation in 2014. North is to the top of the picture. Image © Hugo Anderson-Whymark.
Trench P and its level of preservation. Several dressed stones are in situ in the lower courses of extant walling and indicate that the original number of decorated stones within the building would have been comparable to the other structures on the site. In common with the other structures, pick-dressed yellow sandstones (SF11608, SF11609 and SF11610) were chosen for the pier ends and, as in Structure 12, brown sandstone was chosen for the lower courses.

Other Trench P structures

To the south of Structure 14 is a large orthostat 3355, which has several deep parallel lines carved into its upper surface (SF11562). This appears to mark the start of the walkway to the southwest of the entrance to Structure 14, but may also relate to Structure 16 to the south. Structure 16 comprises two short stretches of walling around a central hearth. The full extent of the building is not yet clear as it extends beyond the limit of excavation to the northeast. Six in situ building is not yet clear as it extends beyond the limit of walling around a central hearth. The full extent of the upper surface (SF11562). This appears to mark the start of the walkway to the southwest of the entrance to Structure 14, but may also relate to Structure 16 to the south. Structure 16 comprises two short stretches of walling around a central hearth. The full extent of the building is not yet clear as it extends beyond the limit of excavation to the northeast. Six in situ decorated stones have been recorded in the west (external) face of walls 1050 and 1191 with a further decorated slab found within a robbing pit. Stratigraphically, Structure 16 predates Structure 7; it may, however, be contemporary with Structure 19 and is built on a similar level.

Structure 22 is a small building (c. 2.80x1.80m internally), which was built on the edge of a mound of rubble overlying the site of Structure 14. Both ends of the internal wall face of the western wall were constructed with two orthostatic slabs incorporated into an internally-faced wall, with external faces on its north and east sides. A single doorway was identified in the north wall. The western half of the interior contains an irregular flagstone floor surface and charcoal-rich deposits. Structure 22 appears to have been systematically demolished immediately after it ceased to serve a useful purpose, as the floor surface was sealed beneath the associated demolition deposit. It was then extensively robbed.

Structure 21 occupies the northwest corner of Trench P, to the west of Structure 1. Its full extent has not yet been revealed but the results of the geophysical surveys indicate that it might be comparable in size to Structure 1 (Nick Card, pers. comm.). At least four courses of walling survive of what appears to be a further sub-oval building with internal piers. No in situ decoration has so far been identified on the walls. The area between Structures 1 and 21 may have once been a paved passage; a finely incised portable piece (SF17458) was recovered from the disturbed upper levels in this area.

PHASING AND CHRONOLOGY

Radiocarbon determinations indicate that the remains in Trench P relate to more than a 1000 years of activity, ranging from c. 3300-2200BC (Nick Card, pers. comm.). There is, however, likely to be a good deal of overlap between the phases of activity identified in the overall sequence (Figure 113). Whilst some of the changes would have occurred very rapidly, others involved a more drawn out process. Activity described as Phases 4, 5 and 6 appears to have happened within the space of one or two generations, with little distinction between different ‘events’. In particular, the level of overlap between Phases 5 and 6 might mean that they can be conflated (Nick Card, pers. comm.).

In contrast, there may have been a hiatus between Phases 1 and 2, or 7 and 8. The sequence remains tentative and is liable to change as the excavations proceed and with more absolute dates. As at Skara Brae, the remains revealed by the excavations at the Ness of Brodgar offer at best a sample of the wider site; spatially limited to Trench P, and chronologically limited to those phases which have been exposed. Nor does this account does not allow for the subtleties of multi-durational phases. Rather than occurring as discrete ‘events’ of construction, demolition and modification, activity would have formed ongoing practice which incorporated processes of differing durations. As such, this thesis focusses upon those areas where meaningful stratigraphic sequences of activity can be followed. The role of excavation is key. It is often only through the deconstruction and dismantling of buildings afforded by excavation that the localised subtleties of phasing can be identified. These insights are fundamental to understanding the stoneworking and decoration discussed here.

DECORATED STONE RECORDING 2010-2014

The Ness of Brodgar is a working excavation site and as such, requires a different approach to the recording of decorated stonework from either Maeshowe or Skara Brae. It also allows a much deeper analysis of the stratigraphic relationships, context and placement of stones than on the other sites and this is reflected in the methodology used during my fieldwork.

Fieldwork methodology

A visual inspection of all extant stonework on the site was carried out during the excavation season 2010-2014. Areas with previously identified markings, were examined and reassessed, and a large number of previously unrecorded areas of in situ decoration were noted. Examination and recording in the field comprised primary written observations, drawings and photographs. Each stone with identifiable working was recorded as a small find and assigned a unique SF number and surveyed in three dimensions using either a Leica Total Station or GNSS. All of the decorated and dressed stone removed from the site between 2006 and 2014 was also

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1. See Methodology in Chapter 1
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<td><strong>1. Early activity</strong>&lt;br&gt;(circa 3300BC)</td>
<td>- Structures under the SE boundary wall (c14 date of circa 3300-3200BC)&lt;br&gt;- Sherd of Carinated Bowl pressed into the glacial till under Structure 14</td>
</tr>
<tr>
<td><strong>2. The first complex</strong></td>
<td>- Construction and use of Structures 17 and 18 (under Structure 8), Structure 20 (under Structure 10) and Structures 23 and 24 (predating the north end of Structure 12)&lt;br&gt;- ?Construction of northwest and southeast enclosure walls</td>
</tr>
<tr>
<td><strong>3. The main complex</strong>&lt;br&gt;(circa 3000 BC)</td>
<td>- The construction and primary use of Structures 1, 8 and 12&lt;br&gt;- The construction and primary use of Structures 14 (including early remodelling), 16 and 21</td>
</tr>
<tr>
<td><strong>4. Collapse and subsidence</strong></td>
<td>- The subsidence, partial collapse and partial demolition of Structure 8&lt;br&gt;- (Structures 1, 12, 14 etc. remain in use)</td>
</tr>
<tr>
<td><strong>5. Structure 10 joins the site</strong>&lt;br&gt;(circa 2900BC)</td>
<td>- The clearance of the SE corner of Structure 8&lt;br&gt;- Construction and primary use of Structure 10&lt;br&gt;- The construction of Structure 19&lt;br&gt;- Phase 2 modification of Structure 1 (including insertion of east entrance) to focus on Structure 19&lt;br&gt;- Structure 11 begins to be built against and between Structures 8 and 19&lt;br&gt;- Structures 1, 11, 12, 14, and 21 continue in use, but in modified forms&lt;br&gt;- Internal remodelling of Structure 10&lt;br&gt;- The construction and primary use of Structure 16</td>
</tr>
<tr>
<td><strong>6. Changing space and use</strong>&lt;br&gt;(circa 2500BC)</td>
<td>- The construction and primary use of Structure 7 including kiln&lt;br&gt;- Further modifications in Structure 10&lt;br&gt;- Remodelling of Structure 12’s internal space because of subsidence</td>
</tr>
<tr>
<td><strong>7. The start of the end</strong>&lt;br&gt;(circa 2400BC - 2200BC)</td>
<td>- Abandonment of main areas of Structure 12&lt;br&gt;- Occupation of Structure 12’s forecourt area&lt;br&gt;- Midden dumping between Structures 8 and 12&lt;br&gt;- Parts of Structure 11 are rebuilt (these overlie midden deposits)&lt;br&gt;- The ‘decommissioning’ of Structures 1, 7, 11, 12 etc.&lt;br&gt;- Deliberate decommissioning and demolition of Structure 10</td>
</tr>
<tr>
<td><strong>8. Later prehistoric activity</strong></td>
<td>- Tertiary re-use of Structures 1 and 12?</td>
</tr>
<tr>
<td><strong>9. Robbing events</strong></td>
<td>- Systematic robbing events across the site</td>
</tr>
<tr>
<td><strong>10. Modern activity</strong></td>
<td>- Postmedieval agricultural activity (including removal of the Brodgar Stone)&lt;br&gt;2003-present: 21st-century archaeological investigations on the site</td>
</tr>
</tbody>
</table>

**Figure 113. Ness of Brodgar, approximate phasing (as of summer 2015). Image © Antonia Thomas.**

All stones were recorded using a pro forma Decorated Stone Recording Sheet (Figure 3); this was used both by myself and by the excavation team on site. Along with written, drawn and photographic records. The majority are housed at Orkney College, although several pieces are stored on site.
with written and drawn information on the location, measurements and basic description of each stone, the sheets allow for the recording of its placement, e.g. whether it was found face up or down, and whether visible or hidden. This allowed the production of a comprehensive database and illustrated catalogues. These data, along with coordinates and contextual information, were inputted into an Excel spreadsheet containing a series of attributes ranging from general location and catalogue information to detailed information on technique, style and type of decoration. These attributes were queried in ArcGIS to allow for the production of the distribution plots.

Several stones were dismissed outright as undecorated and removed from my lists. Nevertheless, the catalogues in the appendices form a true record of the stones recovered between 2006-2013, and contain several stones with ‘indeterminate’ marks. To allow meaningful statistical analysis, the GIS-based plots shown in this thesis are restricted to the 375 Trench P stones from a clear context and which have unquestionably deliberate marking or decoration. Twenty-nine ‘worked stones’ are also discussed in this thesis, where the process of their working, or the nature of their context, made them relevant to the current account. These are discussed in more detail in Chapter 7. The end of the 2013 season of fieldwork marked the ‘cut-off’ point for the purposes of my research, although I was on site in 2014, when a further 77 decorated stones were recorded. Along with several stones found during the 2015 excavations, these are discussed anecdotally where relevant.

Survey results

Between 2006-2013, a total of 600 stones were recorded in the Ness of Brodgar small finds database as having decorative working and were examined. Of these, 25 stones were found to be undecorated and were removed from my list, and a further 27 were found to be duplicate or mis-assigned numbers, leaving an assemblage of 548 stones. The focus is on architectural stonework, although a number of portable fragments and worked stones have also been included as relevant to the discussion. Decorated stones are found across the site, in all structures or all phases, in both external and internal stonework. The assemblage includes stones which have been deliberately pecked, incised, carved, cup-marked, pick-dressed and chiselled. Up to and including 2013, 13 stones from the site had been recorded as ‘painted’. These are currently inaccessible pending conservation and are not discussed in any detail in this thesis.

Unstratified stones

My study included 93 unstratified stones (92 from Trench P, and 1 from Trench J), the majority of which were recovered from the spoilheap. Many more were found in a poor and laminated state weighing down the plastic covering the trench between excavation seasons. They are overwhelmingly incised, often with fine, barely visible markings. This distribution is indicative of the difficulty in identifying incised stones - and conversely, the ease of identifying pick-dressed, pecked and cup-marked stones - during excavation. In 2011-2012 the large numbers of decorated stones found on the spoilheap was due almost entirely to the keen eyes of Christopher Gee, who was actively checking discarded stones for decoration.

The Trench P assemblage

The discussion in this thesis focusses upon Trench P, the main area of excavation, from which a total of 232 stones were removed during excavation between 2007 and 2013 (Figure 114). There were 196 stones were left in situ at the end of the 2013 season. The markings on 53 of these 428 stones could be considered indeterminate (i.e. possibly due to damage or wear rather than deliberate). These are detailed in the catalogues, but excluded from the GIS plots. Of the remaining 375 stones from secure contexts and considered to show deliberate markings, 219 were in situ within structural elements such as walls or internal furniture.

Other areas of the site

Fifteen stones were recovered from areas outwith Trench P; five from Trench J, four from Trench N, three from Trench R and two from Trench T. No decorated stones were recovered from Trench M or any of the other excavated areas on the site. The wider assemblage of decorated stone from the Ness of Brodgar is discussed below.

DISCUSSION

At the Ness of Brodgar, examples of decorated and dressed stone have been found everywhere (Figure 114). They appear across the site, in every standing structural element of each building, within floor deposits and in demolition debris. The assemblage is discussed in further detail in Chapters 7, 8 and 9; the following narrative summarises some of the key observations from my fieldwork.

Incised and carved stonework

Across the site, walling survives to over 1m in places and decoration appears at all levels within that stonework. As at Skara Brae, incised markings are frequently found at floor level, in tight corners or other awkward locations in the buildings. Decoration often occurs in clusters of three or four incised stones. The concentration of decoration around entrances and thresholds has been observed at many Neolithic sites both in Orkney and
At the Ness of Brodgar, the entrances to most of the structures have been considerably reworked, or in the case of Structure 10, almost completely robbed out, making analysis of the patterning in these areas difficult. In Structure 1, however, there is a particular concentration of decorated stones around the southern entrance (Figure 115), with eleven recorded examples; these are fairly evenly spread between the western and eastern flanks (the left-hand and right-hand sides upon entry respectively). This apparent distribution is not, however, as chronologically straightforward as it initially appears. Whereas some decorated stones appear to be related to a primary stage in the build, others are associated with the later blocking and reorientation of space. The problems of phasing in relation to art and architecture are discussed in more detail in Chapter 8.

**Surface preparation of stones**

As at Maeshowe and other sites such as Quoyness, several of the incised stones from the Ness of Brodgar appear to have been polished. Where these stones are *in situ*, it is notable that adjacent stones are not polished, suggesting that this preparation took place *prior to* or *during* construction. This implies that the position and decoration of the stone are connected, and were considered at an early stage in the build. Three stones from Structure 12 (SF6428, SF7141, SF16221) exhibit
Figure 115. Structure 1, S entrance, showing distribution of decorated stones. Image © Antonia Thomas.
dragging scars and polish on their upper faces. In each case the scars extend beyond the surface of the stones, and are more pronounced at one end, suggesting an uneven distribution of force. It is possible that these stones were supports, or ‘trestles’, for rolling or dragging larger stones and these may have played a role in the construction process (Chapter 7).

**Motifs and execution**

Incising is typically shallow and often takes the form of little more than scratches, executed with flint and difficult to see once finished. In several cases, the scratches appear to have provided sketches which were subsequently formalised with further incised or carved...
markings. Incised stones can be divided into those which have extensive ‘edge-to-edge’ decoration, often comprising a mass of parallel and intersecting lines, and those with ‘free’ decoration, often discrete motifs, which does not extend to the edges of the stone. This disparity may highlight the point at which the stone was incised; only very rarely does decoration on an ‘edge-to-edge’ decorated stone extend to its neighbour within a wall, and suggests that the incising took place either before or during construction. By contrast, those stones exhibiting ‘free’ decoration may have been marked at any point in the life of the building.

The incised markings are almost exclusively linear and geometric in design. Angular motifs - chevrons / zigzags, triangular, quadrangular or scalariform signs - dominate the assemblage, with parallel vertical lines and chevrons / zigzags the commonest designs. Banded designs, similar to the Brodgar Stone, have motifs which are contained within parallel lines, typically along the edge of a block but also occurring on the upper face of slabs. A particularly fine example was found in 2015 within wall 3079 of Structure 8; this would not have been visible after construction (Figure 116). Opposed-triangle motifs, and the related opposed-fan motif (dubbed ‘Brodgar butterflies’; Figure 117), occur infrequently but in significant locations on the site such as in the blocking in the Structure 12 forecourt. Chevrons and triangles filled with lattice or net patterns are common, in particular in Structure 7, but also in the blocking of Structure 1’s S entrance and intramural passage, and the forecourts of Structures 10 and 12 (Figure 118). These contexts are all broadly contemporary to one another (Phase 6).

Generally, however, there is no clear patterning in the distribution of the different incised motifs. Chevrons, zigzags, parallel lines, nets and cross-and-lozenge designs appear throughout the main structures. Most of the incised stones have no discernible design at all, whilst others have such a confusion of overlying designs that any identification of motif becomes arbitrary and subjective. Paradoxically, it is often the most extensively decorated stones which are the most faintly marked - and the least visible (Chapter 7).

**Pecked stonework**

Many stones -- usually the coarser-grained sandstones - show signs of deliberate pecking, although this is often random and does not form coherent patterns. In several cases it overlies, or obliterates, underlying incised markings. Less commonly, pecking is used to create more distinctive designs. There are three examples of meandering motifs (SF15624, SF17473 and SF22457 from 2014), and two circular designs (SF3133, SF16138; Figure 119). This is in striking contrast to Ireland, for example, where curvilinear designs dominate assemblages, but reflects the proportion of incised designs; as at the Irish sites, the curvilinear designs at the Ness are all pecked. In several cases, discrete peck-marks appear as less confident versions of cup-marks, but can be considered a variation on the same theme. This can be seen in the appearance of the triple-cup or trefoil motif, which is formed by three cups or discrete pecks in a triangular pattern (Chapter 8). In some instances, this appears overlying incised lines, as on the Brodgar Stone itself.

**Cupmarks**

In addition to the discrete pecked designs forming crude cupmarks (see below), there are several examples of cupmarks which are pecked and ground to form smooth regular depressions. These are predominantly associated with Structure 10, and in particular the forecourt area (Figures 111, 112, 121). Although this might superficially appear to connect this style of working to a chronological phase, more subtle examination of the context of these stones suggests that this process of working is connected to structural change and modification. This will be discussed in more detail in Chapter 8. Small drilled cups have also been recorded on 16 stones across the site. These are commonly about 10mm in diameter and depth and often appear in small groups.

**Dressed stonework**

As previously discussed, pick-dressing is relatively rare in Orkney; outside of the Ness of Brodgar, it is only seen at Maeshowe, the Stones of Stenness and the Dwarfie Stone (Philips and Bradley 2000, 108). At the Ness of Brodgar, 92 pick-dressed stones have been recovered from Trench P contexts (Figure 121). As at Maeshowe, pick-dressing occurs for different reasons, at different stages in the life of the buildings. In many cases it represents a ‘finishing touch’ to make edges of stonework flush, whereas in other cases it can be understood as a form of decoration in its own right. It is predominantly reserved for sandstones.

Pick-dressed yellow sandstone is used extensively at the end of internal piers in Structures 1, 8, 10, 12 and 14, but only in Structure 10 is red sandstone found in situ in structural contexts, most notably where it was used for the central pillar in the dresser (1497; SF11515). The distribution of loose pick-dressed stones corresponds well with those which remain in situ in walls and piers, and confirms the relative density within Structures 10 and 12. Of the 92 pick-dressed stones from Trench P, 31 also exhibit other forms of working such as incising, chiselling or cup-marking. The implications of these sequences of attention are discussed in Chapter 8.

**Bas relief dressing**

Three sandstones from the site exhibit bas relief pick-dressing. This sophisticated variation on pick-dressing
Figure 117. Examples of opposed-triangle and opposed-fan motifs from Trench P. Image © Antonia Thomas.
Figure 118. Examples of filled net and lattice motifs from Trench P. Image © Antonia Thomas.
sees certain areas of the surface differentially worked, making designs stand in relief. Two of these were from Structure 10: the orthostat forming the right-hand side of the dresser (SF11519) and a block whose entire face is dressed with an opposed-triangle motif (SF11605). A triangular piece of red sandstone decorated with two triangles in relief (SF15961), was recovered from rubble layers filling the S end of Structure 8, although its deposition could relate to a construction or occupation phase of Structure 10. It certainly appears that pick-dressing was generally meant to be seen. As in other buildings, in Structure 12, sandstone blocks have been used in the ends of the piers, but are pick-dressed predominantly on their southern corners. This indicates that the dressing was meant to be seen from the south, presumably from the primary entrance at that end of the building.

**Chiselling**

Prior to the excavations at the Ness of Brodgar, chiselling had only otherwise been recorded at Maeshowe in Orkney. It is a rare occurrence at the Ness, with only eight stratified examples recorded 2006-2013. Seven of these are from Structure 12, with three still in situ on the ends of internal piers, with an eighth from Structure 10. Further chiselled examples were recovered from the spoilheap (SF11187), and excavated from Structure 10 in 2014 (SF19561). As at Maeshowe (Loveday et al. 2012), in each case where a sequence can be discerned, the chiselling overlies pick-dressing; it has not been identified on its own.

**Multiple working**

Although many stones have clear and distinctive forms of working, nearly a third of the Trench P examples (107) exhibit more than one technique of decoration, e.g. they might be incised and pecked, or cup-marked and pick-dressed. In many cases, subsequent working partly obscures or obliterates earlier designs. That many stones are worked, and reworked, several times - often with a range of different designs overlying one another - suggests that their visual appearance was not consistently important. If a design can be added to, defaced, altered or augmented, any ‘meaning’ which lies behind it is not fixed. There are thus several issues of visibility and interpretation which are not resolved by traditional motif-based approaches to the designs.

**SUMMARY**

The decorated and dressed stone from the Ness of Brodgar forms the largest collection of architecturally-situated rock art in the UK. Over 200 examples have been found in situ on the walls of the buildings, whilst many more come from stratigraphically-secure Neolithic deposits. The quality of the stonework at the Ness of
buildings. This allows the recording of often slight and barely visible decoration and stoneworking in situ, and as they are first revealed during excavation. The insight this allows is crucial, and timely, for several reasons. The fragility of the stonework once exposed through excavation means that surfaces often laminate away after one or two seasons of fieldwork; coupled with the faintness of much of the marking, this means that if the decoration was not actively recorded during excavation, it might never be noted at all.

This dismantling and deconstruction through excavation also allows an escape from the reductionist approaches
to prehistoric architecture that hinder many studies, and affords a consideration of the reverse processes of assemblage and construction. And at each stage of the construction process, in all types and phases of contexts across the site, we find decorated and dressed stones. This allows us to engage with the question of when the particular stones within the buildings might have been carved, and explore the longer biographies of both buildings, and their constituent parts. In each case where stonework has been dismantled, decorated stones have been found. Several more ‘hidden’ stones were discovered within contexts where they might be considered votive, such as foundation pits, blocking or closing deposits. Some of the more elaborate pieces may have been designed to be appreciated, and their position indicates that they may have served to mark important thresholds or flows of movement (Thomas 2014b, 21). However, that a number of decorated stones were built into walls or floors, and hidden from view, indicates that visual appearance was not consistently important for all the stones. Many of these may have been re-used, but for others, it may be that the process or performance of working the stone was more important than their finished appearance (Card and Thomas 2012, 121; Thomas 2014b, 20). Moreover, the faintness of many of the scratched incisions frequently rendered them almost invisible, and it is difficult to see what visual purpose they served.
At the Ness of Brodgar, a range of stone-working practices is in evidence, from incising and carving to cup-marking and pick-dressing. This diversity demands a nuanced investigation of the relationship between raw material, techniques of execution and the appearance and placement of stones. Nevertheless, these techniques of execution are not mutually exclusive. Much of the stonework exhibits incised designs which were subsequently obscured by cup-marking or pecking, and some of them may have been revisited and added to on several occasions. Their appearance does not remain static and there is a temporality to their visibility which can only be understood in relation to the wider context of stoneworking and decoration. Perhaps more than any other site, therefore, the Ness of Brodgar offers a lens through which to see the multiple ways in which art and architecture was created, embellished, viewed and occupied – how it was imbued with meaning, and the manner in which it was inhabited - in Neolithic Orkney. The subtleties of this will be explored further in Chapters 7, 8 and 9.
7. PROCESS

Figure 122. SF11566 *in situ* at The Ness of Brodgar. Image © Antonia Thomas.
INTRODUCTION

Throughout this book, I have maintained that the archaeological literature on art and architecture has largely focussed upon form to the exclusion of process. This can be seen at a range of scales. Discussions of Neolithic art have tended to treat the ‘decoration’ of architectural stonework just as the term implies: superficial, and belonging to a single phase. The unique contexts and survival of Neolithic buildings in Orkney, however, both demand and allow a more nuanced approach, which takes account of the subtleties of the long sequences of attention on sites and the social practices of stoneworking.

In Chapter 4, I discussed how narratives of Maeshowe have often focussed upon its built form as a monument, disregarding the processes of construction which allowed its monumental form to emerge. A more considered examination reveals the image of a stable and premeditated monument to be misleading. Different forms of stoneworking and marking are visible, ranging from incised motifs, pick-dressing and chiselling, to the pecking of recesses. Some of these may be linked to stages in the construction process. In other cases it seems that the stones in the building continued to be worked and added to throughout its main period of use (and indeed beyond). There are different temporalities of engagement implicated in both the building’s art and its architecture.

At Skara Brae, the nature of the remains affords further investigation. Excavation has laid bare various processes of construction, reconstruction and redevelopment, and it is possible to start to understand how these might relate to the placement and appreciation of particular stones. Where earlier phases of structures have been exposed, or where walling has been removed, decorated stonework has often been found.

The ongoing fieldwork at the Ness of Brodgar allows the analysis to be taken further. The diversity of stoneworking processes and the number and distribution of decorated stones is without parallel in Orkney, whilst the deconstruction of buildings through excavation allows a critical assessment of the contexts in which these are found. Many stones exhibit several stages of working, decoration and reworking, indicating that their visual appearance and any related ‘meaning’, were not fixed, and that we must look beyond the form of both individual stones and the wider buildings. This allows the discussion to be taken beyond the surface, and affords a consideration of the myriad ways in which working stone was meaningful in Neolithic Orkney.

In this chapter, I will examine the usefulness of thinking in terms of process in both art and architecture. Starting with a discussion of the materiality of the stones in question, I will explore the different variables that interact with that materiality and how these relate to various forms of engagement through stoneworking. Using a series of case studies from the Ness of Brodgar, different stages of the building process will be examined as a means of exploring how stoneworking might play a role at different times in the life of the site. This expands the discussion beyond mere decoration to highlight the multiple ways in which stone was attended to, used, worked and appreciated, in Neolithic Orkney.

A RETURN TO THE MATERIAL

The subject of this book is the decorated and dressed stone found in architectural settings in Neolithic Orkney. Stone is therefore unsurprisingly at the heart of the discussion. But given that comparable designs are found on pottery and worked bone tools, as well as the architectural stone and portable stone artefacts that are the subject of this research, what is the significance of the material itself in relation to its decoration? This question can partly be answered, of course, by the fact that in Neolithic Orkney, people built houses and tombs out of stone (Chapter 3). Wooden structures in other parts of the country may have been decorated, but have not survived. As a material, stone’s perdurance means that even after 5000 years, archaeologists can study buildings and any decoration associated with them within their original architectural context. Both the assumptions tied to the perceived durability of stone and the notion of an ‘original’ architectural context are, of course, problematic, and I will return to them later in this chapter. But first, we have to think about the stone itself.

Rock, stone and stoniness

In common with many Neolithic sites, at the Ness of Brodgar, the majority of the artefact assemblage is comprised of stone. But within this apparently simple material category are a range of different subclassifications. There are ‘stone tools’, ‘worked stones’, ‘foreign stones’ and ‘incised stones’, let alone flint and chert, which, of course, are also ‘stone’. If unmodified and retained, it is termed simply ‘stone’, when the geological term rock would be more appropriate. At the same time, the spoilheaps around the site were composed largely of stone which had been considered to be mere rock: i.e. non-artefactual and consequently discarded. These terms are loaded with different expectations and assumptions regarding Neolithic intentionality; the different artefact categories we construct in the present affect our interpretations of the past (Lucas 2001, 64). I will come back to this point later in this chapter and in Chapter 9, but for the current discussion it is important to note that on site, the distinction between these different categories is often subjective and arbitrary, depending as much on the previous experience of the excavators, as on the context in which the stone was found. On a 21st-century excavation, what stone is, and its perceived value and significance, is not therefore fixed. So what about in prehistory?
In the Neolithic, stone was encountered and acted upon daily, in nearly all spheres of life (Cooney 2008, 210). Its importance, however, transcended quotidian practicality. People went to great lengths to obtain different, and very particular types of stone for artefacts (Bradley and Edmonds 1993; Cooney 2002; Edmonds 2004), burial monuments (Mitchell 1992; Bukach 2003; Scarre 2004) and stone circles (Collins 1976; Downes et al. 2013). In various settings, the choice of stones for particular purposes appears to have been directed by colour, texture, the sound that different rocks made, the places they came from or a combination of these factors (Chapter 9). We can infer that stone, and the type of stone used, was meaningful.

Durable, yet malleable (O’Connor and Cooney 2010, xxii) and infinitely variable (Conneller 2011, 2), it is perhaps not surprising, that stone has been the focus of so many of the recent debates surrounding materiality.

**Materials and materiality**

I have argued in previous chapters that process has often been overlooked as subordinate to form. In a parallel argument, Chantal Conneller describes how for much of the history of archaeology, form has been privileged at the expense of materiality (2011, 25). This can be understood as part of a wider view which reinforces a dualism between culture and nature, or humans and the ‘rest of the world’ (Ingold 2007, 9). Within this polarised understanding, the ‘cultural’ is favoured over the ‘natural’ and materials are ‘raw’ until they have form, derived from a mental template, imposed upon them by humans (Conneller 2011, 24). This view sees the world as a series of material surfaces, ‘to which concepts emerging from a higher place are attached’ (Boivin 2008, 6). Material engagement theory was proposed in an attempt to overcome this nature/culture opposition (DeMarrais et al. 2004; Malafouris 2013), but, like earlier phenomenological approaches (e.g. Tilley 2004), has been criticised for tipping the balance towards the materiality of objects, at the expense of the properties of the materials themselves (Ingold 2007, 3; 2013, 98). For many writers, the term ‘material culture’ is problematic as it emphasises this duality (J. Thomas 2007), although ‘hard to avoid when it is used so widely and systematically’ (Boivin 2008, 26).

Despite criticisms (e.g. Ingold 2013, 27-31), in this book I follow Nicole Boivin in using the term material to incorporate ‘all that is tangible rather than abstract’ and materiality ‘to emphasise the physicality of the material world’ (Boivin 2008, 25-26). These definitions might be problematic, but it is important to move beyond what has become a semantic debate. To go further, I would argue that Ingold’s suggestion that materials are ‘ineffable’ (Ingold 2013, 31) rather misses the point. Instead of trying to understand what a material might ‘mean’ per se, we need to explore the way in which it was used.
and worked. This allows us to examine how a material might be meaningful, ‘because its very materiality exerts a force which in human hands becomes a social force’ (Boivin 2008, 6). Rather than a one-way relationship, what becomes interesting is the ‘dialogue between the maker and the material’ (Leroi-Gourhan 1993, 307 cited in Conneller 2011, 27; my emphasis). It is this reflexive relationship between people and stone that I hope to draw out here (cf. Pollard and Gillings 2010, 31).

**MATERIALITY IN FLUX**

The relationship between people and stone is enacted through practice. In Chapter 2, I discussed Maurice Bloch’s famous study of the carvings in Zafiminy houses in Madagascar. These elaborate designs did not, argued Bloch, ‘mean’ anything in a representational sense, but were rather the material embodiment of the ‘hardening’ through time of wood, bodies, houses and marriages (Bloch 1995). For the Zafiminyard the practice of wood carving ‘honours’ the wood by making its hardness more evident and more beautiful (Boivin 2008, 86). There is a connection between the process of working, and the ontological significance of the raw material. In Neolithic Orkney too, there appears to be a direct relationship between the raw material – in this case stone - and the way it is worked. At Skara Brae and the Ness of Brodgar, certain types of stone are associated with particular forms of attention. Percussive techniques such as pecking, pick-dressing and cup-marking are predominantly found on the sandstones, with laminar flagstone usually selected for incising and carving (Figures 124, 125). To a certain extent, there is something of a ‘truth to materials’ at play, as different rhythms and techniques of stoneworking seem appropriate to particular types of stone. This may demonstrate the deep knowledge of not only the properties, affordances and potentials of different materials, but also their histories and associations, a knowledge which would have been gained through working the stone itself (Chapter 9).

At certain times this may have involved an ‘honouring’ of the stone, as the innate qualities of the material are brought out by specific techniques - the polishing of flagstone, the pick-dressing of the Eday bed sandstone. This opens up the discussion to examine the different techniques of engaging with stone, and the relationship between process and material. Nevertheless, this relationship is not straightforward or uniform, and, as we will see below, can involve a range of different variables.

**Texture and colour**

By analysing a range of both artefacts and monuments, Vicki Cummings has suggested that the *texture* of stone was an important property in the Neolithic (Cummings 2002). This would have been appreciated through touch as well as visually, but Cummings suggests that it was actually the *transformation* from rough to smooth in the *making* of an object, which was significant (op. cit., 256). A similar case has been argued by Gabriel Cooney (2002) in relation to the finishing of polished axes in Ireland, highlighting the transformative nature of grinding and polishing. These actions emphasise the differences in colour and texture between raw material and worked product, as the artefact emerged through *process* (op. cit., 95). A similar intention might be behind the polishing of architectural stones recorded at many Neolithic sites in Orkney. At Skara Brae and the Ness of Brodgar (Figure 124), many of the incised stones appear to have been polished first. Polishing the stone transforms the surface and enhances not only the richness of the stone’s natural colour, but also the contrast between the incised lines and the surface of the stone. The effect is similar to that conjectured for the application of paint prior to incising (Bradley et al. 2000, 54).

Whilst polishing enhances the *smoothness* of certain stones, pick-dressing and chiselling increase the *roughness* of a surface. They can obscure and even obliterate the natural qualities of a surface, and demonstrate an intense interest in the *texture* of stones (Cochrane 2009, 164), and a concern to create a diverse range of effects (Figure 125). At the Ness of Brodgar, the majority of the red and yellow sandstones found so far are pick-dressed. This may indeed be to draw out the colour of the stone, although, as Chris Scarre points out, colour is only one element of the materiality of stone used in megalithic architecture. Deployment which appears to relate to the *visual* qualities of colour may actually be about texture, mechanical properties, or a reference to its source (Scarre 2004, 199). Rather than being significant *per se*, it may be that colour acts as a marker for the stone’s provenance and ontological significance. The enhancement, or drawing out of colour and texture through polishing or pick-dressing may therefore serve as a mnemonic process, linking particular stones to their place of origin in the landscape (Cooney 2002, 2004).
Art and Architecture in Neolithic Orkney

Figure 125. Different surface textures created by different forms of pick-dressing and chiselling from the Ness of Brodgar. Clockwise from top left: SF8698, red sandstone with spread area pick-dressing on five faces; SF16138, heat-affected yellow sandstone with confined area picking; SF11187, yellow sandstone with chiselling overlying pick-dressing; SF11605, yellow sandstone with bas-relief pick-dressing; SF3133, yellow sandstone with pecked cup-and-ring design; and SF15961, red sandstone with bas relief pick-dressing. Image © Antonia Thomas.

Light
In Structure 12 at the Ness of Brodgar, the concentration of pick-dressed stones on the south corners of the internal piers 96; see Chapter 9). Colour has a further aspect, as over the course of the day, and with changing seasons, light changes and affects the appearance of colour (Jones and MacGregor 2002, 10-11). Colour, like light, is mutable and temporal.
indicates that they were meant to be *seen* upon entering from the southwest entrance. This mirrors observations at passage grave sites in the Boyne Valley, where the visibility of pick-dressed stones appears to favour a person entering, rather than exiting a space (Cochrane 2009, 165). In Structure 12, the pick-dressed areas of the piers would be differentially illuminated upon entering, an architectural sleight of hand which made the interior appear more extensively decorated than it actually was. It is these parts of the stones which would be visible, and which would *catch the light* (from a torch, from hearth-fires or even natural daylight) as one moved through the building from the south entrance. The coloured sandstone at the Ness of Brodgar was meant to be appreciated, and light played a significant role in that appreciation. Light draws out, and creates different experiences of texture and colour - indeed, colour needs a *lightscape* in order to ‘perform’ (Bille and Sørensen 2007, 270).

The subtle relationship between texture, colour and light has been recognised at a number of other Neolithic sites throughout Europe (Chapter 2). Many passage graves and ceremonial structures appear to have been built to allow for the manipulation of natural light. This is frequently

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**Figure 126. The play of light and shadow: SF11520 in situ, Structure 12, Ness of Brodgar. Top: at noon; Bottom: in the late afternoon. Image © Antonia Thomas.**
linked to particular times of the year, such as solstices (for example at Maeshowe). The architectural effect of light is so influential it has even been compared to a building material (Bille and Sørensen 2007, 270); it is performative and can dramatically transform the experience of a particular space (Tilley 2004, 132). The role of light in helping architecture perform extends to the visibility and appreciation of the internal stonework. At Newgrange and at Loughcrew Cairn T, for example, carvings at the rear of the chambers become illuminated at specific points in the year. However, a frequent observation at passage graves is that decorated stonework was positioned in locations which would have been least illuminated by sunlight entering the passage (Bradley 2009, 62-63). Certain locations may have been strategically chosen for their lack of natural illumination; if light can be exploited as a medium, shadow can also be manipulated to great effect (Tanizaki 2001 [1977]). George Nash has suggested that passage grave art was placed to change the ambience of the space between the passage and chamber, particularly at the point where natural light fades (Nash 2007a, 124).

During my fieldwork, the performative qualities of light were emphasised both on site and in the photographic studio. Just as Peter Leith and Tom Kent realised in the 1920s (Prologue, Chapter 1), subtle shifts in lighting could dramatically affect the visibility of the stone’s surface (Figure 126). In the strong light of the Orcadian summer at the Ness of Brodgar, the lightly scratched marks were often only visible in early morning or late afternoon light. On several occasions I would return to a wall, only to struggle to see elaborate incised motifs that were clearly visible earlier that day. The appearance of the markings, dependent on the daily movement of the sun, was mutable and often unpredictable (A. Thomas 2014a, 148-149): this was a ‘performance of concealment and revelation’ (A. Jones 2012, 83). In the Neolithic, the way in which light interacted with different parts of the buildings and the stones within them, would have been similarly mutable. The goal is to understand how light – and sight - played a role in different stages in the life of the buildings through construction, occupation and even demolition.

**Figure 127.** Incised stones with barely visible, but extensive, ‘edge-to-edge’ decoration from the Ness of Brodgar. Top: SF17479, Structure 12; middle: SF13733, Structure 1; bottom: SF11529, Structure 1. Right-hand images shown with digitised overlays to highlight incised lines. Image © Antonia Thomas.
**Visibility and audience**

The manner in which light interacts with the surface of stones depends not only on their architectural position, but also their qualities of surface and the manner in which they have been worked. Pick-dressing and cup-marking is readily illuminated and visible in several different types, angles and distances of light; by contrast, scratched designs require a raking light close to the surface to be seen at all. This suggests that certain types of working were experienced and seen differently, even when in similar positions in the buildings. At Maeshowe, many of the incised designs are located in discreet corners, whilst at Skara Brae and the Ness of Brodgar they are frequently found near ground level, or in awkward locations that minimise their display. Many of the incised stones are so lightly scratched as to question whether they were meant to be seen at all. These are not only barely visible, but their designs can not be felt either (contra A. Jones 2012, 93). And at the Ness of Brodgar, it is often the most extensively-incised designs which are the least visible (Figure 127).

Whilst many incised designs are barely visible, cup-marked and pick-dressed stones interact differently with light and can be appreciated from further away. Accordingly, they are often located in positions that have sufficient space to allow that appreciation, such as in the forecourt of Structure 10 at the Ness of Brodgar. The relationship between light, visibility and architectural decoration is neither fixed nor universal, and these observations challenge many of the assumptions surrounding Neolithic architecturally-situated art. The diversity of different processes – for example, pecking, cup-marking or incising – means that they can not be treated unilaterally. Nor can all forms of stoneworking and decoration be treated as though they were meant to be seen. This is even more apparent in the case of ‘hidden’ art.

**‘Hidden’ art**

At Skara Brae, where earlier phases of structures have been exposed, or where walling has been removed, ‘hidden’ decorated stones have often been found. At the Ness of Brodgar too, excavation has allowed the exposure of a significant number of decorated stones which were built into walls or floors, and which would have been hidden from view during occupation. As such, visual appearance appears not to have been a consistently important characteristic for all decorated stones (Card and Thomas 2012, 121; A. Thomas 2014b, 20).

It is certainly difficult to explain ‘hidden’ art practically, despite its frequent discovery at Neolithic sites. As such, it has been explained as evidence of a last-minute change in architectural design resulting in the marks being accidentally removed from view (Powell and Daniel 1956, 47). The non-visibility of hidden carvings is also seen as evidence of their insignificance, regardless of the context in which they are found. At Newgrange, the apparent disparity between the ‘official’ visible ornament and the ‘inexpert’ hidden designs was noted, with the latter seen as artistic sketches, or even the work of apprentices or labourers (Herity 1974, 186; O’Kelly 1978). More commonly, hidden stones are seen to result from simple re-use from an earlier building (Nash 2007a, 138), a functionalist view which chimes with modern concerns with efficiency and common sense. The logic of the final form is again apparent here; these discussions fail to recognise that they are focussing only on one particular point in time, the assumed time of the completed building. Hidden stones are neither a unitary phenomenon, nor one which can be explained by a universal interpretation (Robin 2008, 185).

As we will see in the rest of this chapter, there are a range of different circumstances which may lead to decorated stones becoming ‘hidden’ and the relationship between process and context is key. Visibility is a shifting, mutable characteristic; it is not enough to think about whether a decorated stone was visible or not, we need to examine at what times it may have been visible or hidden. This opens up the discussion to look beyond a notion of buildings as fixed in a single ‘as built’ form, to think about how they evolve through process.

**ARCHITECTURE AS PROCESS**

Although architecture comprises both process and product (Humphrey 1988, 17; Blier 2009 [2006], 233), approaches to Neolithic buildings have largely ignored the process element, beyond, for example, discussions of labour investment (e.g. Renfrew 1979; notable exceptions include Evans 1988; Edmonds 1999; McFadyen 2006, 2008; Richards 2004a, 2004b). In relation to Silbury Hill, Josh Pollard has highlighted the static nature of most discussions of Neolithic monumentality, which rest upon the logic of single interpretation, and fail to account for how built structures actually came into being (Pollard 2013, 180). As we saw in Chapter 3, this is a particular problem in relation to Neolithic Orkney, where the apparent durability of stone has led to prehistoric buildings being seen as fixed and unchanging. Thus discussions of Maeshowe have presented it as a singular and static building. Its characterisation as a monument is in itself problematic, as this terminology is indebted to notions of stability and perdurance (cf. Pollard 2013, 184).

At Skara Brae and the Ness of Brodgar, the identification of multiple phases of building and rebuilding, over several hundreds of years, allows a messier picture to emerge. Excavation has dismantled both the buildings’ monumental form, and their presentation as fixed entities. It is possible to see beyond the inert form of the structures as they were at one particular point, to gain an insight into their emergent properties and how they unfolded through time (cf. Pollard 2013). This allows a shift from static, symbolic and semiotic approaches to a focus upon architecture as embodied practice (Marchand 2006, 46).
In this section, I will explore some of the stages in the life of the buildings that can be identified through process. The categorisation of these stages is in many ways arbitrary; a modern heuristic device to structure the discussion. As suggested for the phasing at the Ness of Brodgar, they form part of a continuous practice which encompasses processes of differing durations. Rather than discrete ‘events’, they form a series of ongoing encounters between materials, space and both human and non-human actors (Allen 2014, 170). Some of these would have been drawn out and so much a part of daily practice as to slip by almost unnoticed, whilst others may have been dramatic events which effected social changes across Orkney as a whole.

**Design and planning**

Earlier on in this chapter, I discussed the notion of the ‘mental template’, the idea that the form of artefacts is intended, designed and then imposed upon a raw material. The same logic has prevailed in discussions of prehistoric architecture, to the point where ‘it often seems as if the layout of a monument was determined by a blueprint held in the hand of an architect’ (Edmonds 1999, 98). This exemplifies Tim Ingold’s ‘building perspective’ (2000, 178): the dominant trope in Western history which prioritises form over process, and ‘the representationalist over the performative’ (Turnbull 2002, 130). In archaeology, the dominance of this view is reinforced almost beyond question by the discipline’s overwhelming reliance on plans and drawings for interpretation (Chapter 8).

Recent anthropological perspectives on architecture have challenged the ‘building perspective’. Using the case study of Chartres, sociologist David Turnbull has argued that most Gothic cathedrals were constructed not by following a plan, but a more ad hoc process of ‘talk, tradition, and trial and error’ on-site (Turnbull 2000, 113). Building practice was not pre-prescribed in detail, but ‘instead allowed scope for action to be precisely fine-tuned in relation to the exigencies of the situation at hand’ (Ingold 2013, 56). Through his analogy, Turnbull argues that the focus on *design* diminishes the role that skilled workmanship plays in construction. A similar argument is proposed by anthropologist Trevor Marchand. Drawing on his earlier architectural training, Marchand apprenticed himself to masons of Djenné, Mali, to study the processes of building the city’s mansions and mosques (Marchand 2006; 2009). In line with Turnbull’s proposition for Gothic cathedrals, he found that at Djenné, the monumental structures were not built to prescribed designs; there was no master plan ‘transmitted’ from architect to labourers. Apprentices learnt about structural possibilities through practice and first-hand experience with the materials, tools and their colleagues, i.e. the diverse assemblage of people and things which come together in building projects. It was through growing familiarity with their trade that apprentices developed aesthetic sensibilities and knowledge of structural possibilities (Marchand 2006, 56-57).

Turnbull and Marchand offer a far more organic notion than that usually proposed for construction, and intriguing analogies for Neolithic architecture. If buildings were not built to a design, then there is not one point at which they can be considered *finished*; there is no ‘original architectural context’. Just as most medieval cathedrals are still being modified and rebuilt to this day (Ingold 2013, 56), many Neolithic building projects were perhaps never ‘completed’ in the modern sense (Richards 2013). Rather than being planned in the mind and then realised on the ground, architecture would have been ‘a continual dialectic between person, practices and material structures’ (Rowlands and Tilley 2009 [2006], 512). The problem, therefore, is not the notion of design *per se*, but with transposing the modern, Western idea of design as a fixed, final and singular entity onto the past. In Neolithic Orkney, the procurement involved in construction projects indicates considerable foresight; whilst the orientation of buildings, and the inclusion of features such as side cells is certainly evidence of planning (below). The key point is that rather than being simply implemented, design would have been interpreted in process.

**Procurement**

At Skara Brae, although there is some quarried rock, most of the building stone appears to have been obtained locally, from rounded beach cobbles. The stones in the houses are generally small and would have been easily carried, allowing all of the members of the community to play a part in assembling for the build. At Maeshowe and the Ness of Brodgar, construction would have necessitated a considerable foresight in the assemblage of constituent materials. At the Ness of Brodgar, the use of stone which originated some distance from the site indicate that this process of assemblage was dynamic and wide-reaching (Chapter 6). The procurement of certain types of stone would have required journeys to specific sources. The connections that these places would have had with particular communities would have then involved the negotiation of a wide range of social relationships between those social groups. Even before the buildings were constructed, their constituent stones were already exerting agency and influencing people (cf. Richards 2004a, 103). This would carry through to the buildings and once constructed, an understanding of where specific stone was quarried from, how (and by whom) it was transported, and how it was worked, would all contribute to its significance (Chapter 9).

Many of the marks identified on the stone on site may relate to this procurement phase. Heavier blocks of stone, and those which had to be transported furthest, may have been faced, flaked or trimmed at the quarry site; other blocks may have been moved to site in their ‘raw’ state for working during the build. Grooves were pecked into the larger stones (e.g. SF16258 at the Ness of Brodgar) to allow them to be dragged to the site with ropes, and manoeuvred into position. The procurement of stone would have
therefore demanded the manufacture of other materials to help transportation, such as twine, and maybe wooden rollers or sledges. Timber would have been gathered as driftwood from beaches, or from woodland. Several stones from the Ness of Brodgar exhibit distinctive dragging scars and polish, which may allude to their transportation or may be due to their having been used as ‘trestles’ or props to support the movement of megaliths (Figure 128). The production of wooden sledges and rollers would require the manufacture of adzes, the making of which would require a further set of tools and practices, and so on (cf. Richards 2004a). Relationships would have been forged and negotiated through participation in these making and gathering activities and materials may have been assembled at specific points in the year, over considerable time-spans (Chapter 9). Before the buildings were even built, their constituent parts were already implicated in a range of social and temporal engagements (ibid.).

Preparing the site

In the Early Neolithic in Orkney, evidence from excavated house sites frequently indicates that the ground was cleared before construction took place. At the Braes of Ha’Breck, Wyre (Lee and Thomas 2012), the topsoil was scraped back to the glacial till before the first stones - the central orthostatic divisions - were inserted into the ground, a phenomenon which has also been observed at Wideford and Smerquoy (Colin Richards, pers. comm.). However, in the Later Neolithic, there is a clear shift. Maeshowe was built on the levelled remains of an Early Neolithic house, a characteristic it shares with The Howe, Stromness. With the exception of House 7, the buildings at Skara Brae appear to have been built over earlier remains, and at the Ness of Brodgar, the superimposition upon earlier buildings is so dramatic that most of the structures were inherently unstable and suffered significant subsidence. In these cases, the site’s physical location was perhaps more important than structural soundness, suggesting that situation in the wider monumental landscape, and the creation of a tangible link with the past took precedence over stability. The immediate impression of durability mattered more than actual longevity, reinforcing the possibility that our assumptions regarding perdurance and monumentality might be misplaced.

Setting out and foundation

At Djenné, Trevor Marchand observed that masons took a series of precautions to ensure the success of the project and the safety and well-being of the building and its inhabitants. The construction of new buildings was started on auspicious days which had been calculated according to the lunar calendar or constellations by groups of elders (Marchand 2006, 52). I have already discussed how light, and particular orientations, often connected to celestial observations, were significant to the builders of passage graves (Chapter 2). Discussions frequently focus on the experience of these orientations once the tombs were built, but they would also reference the auspicious occasion of the construction itself.

Monoliths, often decorated, appear to have formed an early focus for activity at several passage graves sites in Neolithic Britain and Ireland. At Maeshowe, the existence of a standing stone to the north of the passage grave (Challands et al. 2005, 242) has been interpreted as evidence for an once-extant stone circle (op. cit. 243), but it may relate to a primary phase of activity on the site related to construction and to setting out for the build. At the Ness of Brodgar, the large monolith 3682 outside of Structure 1 may serve a similar role. Its position within the stratigraphic sequence is not yet clear, although it is at the basal level for, and aligns with Structure 1 and may be part of a ‘setting out’ phase. Interestingly, it is decorated with finely incised intersecting lines (SF18939). Smaller decorated ‘marker’ stones also appear to have been inserted.
into the structures themselves during the build. At the rear of the dresser in Structure 10, a pick-dressed red sandstone (SF11514) was incorporated into the walling exactly in line with the red sandstone forming the front central pillar (SF11597). The rear stone was not visible once the dresser was constructed, but emphasises the subtle positioning of decorated stones, visible or not. Before, and throughout, the construction of the buildings, spatial layout and orientation were being carefully negotiated.

In Neolithic Orkney, the first act in construction – the foundation - was the marking out of the building footprint and the insertion of projecting orthostats, the hearth stones and threshold stone (Richards 2004a, 108; Downes and Richards 2005, 60). The marking out that the insertion of these elements allowed would have been the initial physical act on site, and would have rooted the alignment of buildings not only in place, but also in the time of the build. Given the significance of these elements and their orientation, it seems likely that this was linked to a particular time of year and perhaps required specialist involvement (ibid.). At Djenné, the start of each new build saw marabouts (local religious leaders) and masons bless artefacts of stone and bone, which were buried along foundation lines to protect the buildings (Marchand 2006, 52). Comparable deposits of stone and bone are frequently encountered in excavations of Neolithic houses in Orkney. At the Braes of Ha’Breck, a small axe fragment was found within a construction cut underlying the outer wall of House 3 – a primary feature which predated the build (Lee and Thomas 2012), whilst in Structure 14 at the Ness of Brodgar, a polished igneous stone and gneiss axe was sealed beneath the primary floor. These items were deliberately placed at a primary stage of the build.

At Skara Brae, I have argued that the placement of decorated stone SB14_097 at the base of a wall suggests that it was placed as a foundation deposit. At the Ness of Brodgar, decorated stone also appears to have been placed as part of foundation rites. In Structure 10, the secondary phase of build, which transformed the internal space, was marked by an impressive series of deposits. Incised stone SF16155 was placed below the bench in the south recess, an axe was deposited under the dresser and a carved stone ball (SF17596) was placed underneath the northeast buttress. In the southwest corner, decorated blocks SF16258 and SF16354 were incorporated into the base of pier 4338. A large extensively decorated slab formed of two refitting pieces (SF16861 and SF16868) was found abutting block SF16258 (Figures 129, 130). This was placed on top of an assemblage of a small axe, decorated pottery, a small cow bone and a non-local stone (Figure 131), and can be interpreted as a foundation deposit for the southwest pier.

At the Links of Noltland, a row of interlinked cow skulls was carefully placed at the base of the wall-core of one of the Neolithic houses on the site (Moore and Wilson 2011). This mirrors the deposition of cow and deer bones, including skulls, as part of the decommissioning of Structure 10 at the Ness of Brodgar (below; Mainland et al. 2014). The deliberate incorporation of mixed, discrete assemblages of stone, soil, wood, pottery, animal bones, decorated stones etc. within buildings suggests that these materials held a significance beyond their normative status. Through their associations, these materials would have allowed different times, places and perhaps even people to be referenced through construction. This is further emphasised by the presence of human burials, likely placed as part of a foundation rite, under the wall of House 7 at Skara Brae.

It is useful, therefore, to think of Neolithic buildings through a relational ontology. This situates human activity within a ‘meshwork’ (Ingold 2006) of broader interactions between human and non-human actors, minerals and elements, technologies and energies (Pollard 2013, 185; see Chapter 9). Elsewhere at the Ness of Brodgar, foundation deposits involved more fragmentary pieces. For example, the silty wall-core of Structure 19 sealed a deposit (FD3763; Figure 132) which contained animal bone (a bovid long-bone and scapula), a non-local stone and a small, flaked, incised stone (SF18069). Its incised lines respected the shape of the stone itself; rather than a broken piece from a larger decorated stone, this had been incised as a fragment.

Similar fragments were found within the wall-core for the main walls of Structures 8 (SF3585) and 14 (SF8633), and within the mound rubble of Trench T (SF16381). Two further decorated fragments were found during excavation within walling in the forecourt areas of Structures 10 and 12 (SF3575 and SF7330). Across Trench P, therefore, small fragments of incised stone have frequently been found within wall-core and foundation deposits (Figure 133), but are rarely found in other contexts. This suggests that their placement was considered and deliberate. These fragments may have already had animate qualities that they brought with them, or the act of carving the stones and placing them may have animated both the fragments and the buildings (Chapter 9). Either way, this opens up the discussion to think about the biographies of particular stones, and how these interact with the life-histories of buildings. Other construction materials would, of course, have been similarly freighted with associations (Chapter 9). This is suggested by the dominant use of clay in the foundation layers at Skara Brae (Alexandra Shepherd pers. comm.). Although it is too early to identify similar layers at the Ness of Brodgar, initial indications are that redeposited clay layers played an equally fundamental role here too.

Building

The inclusion of a cow scapula within the foundation deposit for Structure 19 is particularly pertinent. Elsewhere at the Ness of Brodgar (and indeed at the
Figure 129. Ness of Brodgar, Structure 10. Decorated slabs SF16861 and SF16868 abutting SF16254, SW corner. Image © Antonia Thomas.

Figure 130. Refitting slabs SF16861 and SF16868, studio photograph. Image © Antonia Thomas.
Figure 131. Ness of Brodgar, Structure 10. Foundation deposit underlying rubble 4357, SW corner. Image © Antonia Thomas.

Figure 132. Ness of Brodgar, Structure 19. Foundation deposit underlying outer (western) wall. Image © Antonia Thomas.
Links of Noltland), there is a relationship between the placement of animal, particularly bovid, bone and decorated stone which bears witness to the significance of these particular materials. I will discuss the association between cattle bone and decorated stone in the context of demolition later, but in this section I would like to reflect further upon the process of building itself.

In Structure 10, the excavation of two orthostats, 2045 (SF11518) and 1475, which bounded the southern and eastern bays respectively, revealed further insights into this process. Although 1475 was undecorated, orthostat 2045 was heavily pick-dressed along one side, and bears extensive incised decoration along its upper surface (SF11518). Within both construction cuts, bovid scapulae were found, blade down, inserted between the edge of the cut and the stone. These appear to have been digging tools for the excavation of the slots, but almost certainly also served as wedges during the positioning of the orthostats (Mark Edmonds, pers. comm.). Whilst the size and robustness of bovid bones of course renders them extremely useful for use as tools, the particular manner in which bovid bones appear to have been deposited across the site suggests that the scapulae’s significance, and their re-use as wedges as part of the process of construction, transcends functional attributes.

This is emphasised by the association of the scapulae with other material in the base and lower fills of the construction cuts. Both features contained a number of coarse stone flakes, several of which had sharp, flat platforms. These match the pattern of flaking seen on the orthostats themselves, and suggests that they were being dressed in situ as part of the process of construction. The waste flakes were then incorporated into the fills of the construction cuts. Within the slot for 2045, the distal end of the scapula protruded slightly above floor level, and would have remained visible once the orthostat was in place. At Maeshowe, the processes of building, as evidenced by pecked notches, presumably for internal scaffolding or manoeuvring stones into place, were also left visible (Chapter 4). The visible inclusion of the cattle bones with the cuts suggests a similar referencing at the Ness of Brodgar. In these cases, rather than conceal the act of building – which might be expected if the ‘final’ architectural form was of overriding significance, the process of construction is highlighted. The identification of these different aspects to the architecture allows a richer picture of the ‘social performance’ of construction (Richards et al. 2013, 120). With Structure 7 at the Ness of Brodgar, however, we can start to not only deconstruct that performance, but also the role that decorated stones played within it.

Building Structure 7

The construction of Structure 7 began with the partial dismantling and re-use of elements of Structure 19, which up until that point, had occupied the area between Structures 1, 8 and 11. The two pillars forming the door jambs for Structure 19’s western entrance, and the lowest levels of coursing (walls 3706 and the later phase 3712) to the north of this entrance, were left in situ and the main wall 1004 of Structure 7 was built on top. Despite only surviving to three courses in height, four incised stones were initially visible in the outer face of 1004, a relatively high number for a short extant stretch of walling. Consequently, during the dismantling of this wall each stone was carefully examined prior to its removal. The need for such a considered approach was quickly justified. The deconstruction of 1004, and the underlying 3712, immediately led to the discovery of further ‘hidden’ decorated markings, including on SF15618 and SF15619, which also had previously-recorded ‘visible’ decoration.

As one of the later structures on the site, it might be assumed that these stones were simply re-used. However, the specific positioning and placement of the incised markings on the stones in walls 1004 and 3712 suggests something rather more interesting. Firstly, the stones which were hidden during construction tended to exhibit singular, discrete motifs on their upper faces, in contrast with the visible areas of stones, which had been extensively incised all along their edges. Secondly, the discrete motifs were the result of a single act of carving, whereas several of the edge-decorated visible stones show sequences of incising. Across the site, the hidden stones within walls are frequently decorated on their upper or lower faces rather than their edge; but those decorated stones which are visible within wall faces are predominantly decorated with edge-to-edge decoration. It is difficult to explain such a disparity if the presence of the hidden stones were due to simple re-use.

There are even indications of when the hidden stones might have been marked (Figure 134). In each case, removing just one of the overlying stones in wall 1004 revealed the entirety of the motif on the face of the stone in the course beneath. The faces of these stones appear to have been marked mid-way through construction, at a point between the first stone being placed on top, and the second which hid the decoration. The relationship between the placement of the stone and the act of marking suggests that the builders were actually incising the stones whilst they were building - by laying a stone, then incising the area left exposed on the stone beneath, then covering up those marks with another stone and continuing the process. The size of the structure means that only a small number of people would have been involved at a close level with the actual placement of stones, but the incised lines were visible at this range. These were intimate acts

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Footnote: Information taken from discussion on context sheet 4909 from the Ness of Brodgar 2013 archive.
of mark-making which nonetheless related to, and fed into wider stoneworking and decoration practices.

In 2014, further ‘hidden’ incised stones were found during the partial dismantling of walls 4411 and 1199 in the outside of Structure 11. As in Structure 19 and 7’s walling, these were also decorated on their upper faces, and appear to have been strategically placed and decorated during construction. Describing these as ‘hidden’ stones, therefore, misses the crucial point, that at certain key points during construction they were entirely visible. It is not enough to think about whether a stone is visible or hidden, we need to explore the temporality of that visibility (Chapter 8).
Figure 134. Decorated stones visible in the main walling of Structure 7/19, the Ness of Brodgar. Image © Antonia Thomas.

Figure 135. ‘Hidden’ decorated stones in the main walling of Structure 7/19, the Ness of Brodgar. Image © Antonia Thomas.
Occupation and modification

Superficially, the division between construction and occupation would appear to be sharply defined: ‘residence begins when building ends’ (Ingold 2013, 47). This division, however, is predicated upon the assumption that there is a point when a building can be considered finished in the first place. At the Ness of Brodgar, the inherent instability of the buildings meant that they would have been continually adjusted and refined; they would never have been ‘finished’. Occupation involved an on-going process of levelling and re-flooring, the modification of structural elements, insertion, pinning and re-building of walls, dressing of corner-stones to make them flush, and the alteration of internal spaces. In Structure 14, the hearth was re-set and orthostatic slabs were inserted early on in the primary stages of occupation. In Structures 8 and 12, the unstable buildings had to be shored up soon after construction. In Structures 1, 10 and 12 at the Ness of Brodgar, the scale of the modifications during occupation was even more dramatic and involved a complete transformation of the internal space. In Structure 1, the entire orientation was rotated, shifting attention to the southern end of the building and the access to the intramural passage and Structures 7/19. A heavily pecked orthostat was inserted into the northern hearth at this time, whilst the new wall of 1224 included a stone with a large, crude cup-mark. In Structure 12, the partial collapse of the southern wall necessitated a rapid rebuild, which used several pecked and cup-marked stones. The most dramatic alterations, however, were seen in Structure 10. The standing stone was enveloped by the new forecourt walling, whilst the construction of buttresses and walls dramatically altered and reduced the internal space.

The reworking of movement, orientation and access wrought by the architectural changes in Structures 1, 10 and 12 evidence new concerns and refute any idea that the form, and ‘meaning’ of architectural form remained static over time. It is telling therefore that these modifications are strongly associated with percussive forms of stoneworking, and with cup-marking in particular. In many cultures, percussive rituals are associated with rites of transition (Needham 1967) and rituals themselves frequently provide ‘a way of telling a story’ (Bradley 2000a, 127). At the Ness of Brodgar, it seems that the performative actions of pecking and grinding may have served to both enact and communicate the new concerns manifest in the architectural modifications. I will discuss this further in Chapter 8.

Closure

The deliberate blocking, demolition or ‘decommissioning’ of both Neolithic funerary and domestic buildings when they fell out of use has long been recognised. In Orkney, passage graves are frequently found to have been blocked at the end of their use-life (Davidson and Henshall 1989, 60-61), whilst the walls of houses often appear to have been dismantled within the Neolithic (e.g. at the Braes of Ha’Breck, Wyre). At Maeshowe, the presence of a pivot stone in the entrance suggests that periodic blocking and unblocking was certainly important for a period; but we do not know whether the passage was blocked for a final time. At Skara Brae, at least some of the houses were deliberately ‘closed’ before the site was abandoned. The entrance to House 6 was blocked by cattle bones and slabs with a cow skull on top (Childe 1929, 243); a cow skull was also placed in the left-hand bed in House 7 prior to the site’s abandonment (op. cit., 259). These can be interpreted as closing deposits, and suggest that despite the ‘abrupt desertion’ (Childe 1931c, 41) put forward by Childe, departure from Skara Brae appears likely to have been a considered event. At the Ness of Brodgar, many of the buildings within the main Trench P complex were deliberately ‘closed’ at the end of their use. In Structure 14, careful deposits mark the start of the sequence of closure, and included the placement of a polished igneous ‘cushion stone’ SF15037, on top of a finely-incised flagstone slab SF15036, within a scoop in the floor (Figure 136).

In Structure 12, an impressive series of structured deposits were placed in the forecourt area and immediately sealed with rubble and refuse-rich soils. They included two complete Grooved ware vessels and several other large sherds of pottery; hammerstones and a polished macehead fragment (SF10912). The northernmost entrance in the forecourt was blocked around the same time. A series of profusely decorated flat slabs formed the base of this blocking; three of these refitted (SF16189; SF16190; SF18521). However, the refitting slabs had been laid facing different directions, suggesting that the stone, originally one large orthostat, had been forcefully broken (Figure 106). This part of Structure 12 was particularly associated with the opposed-fan motif (Figure 117); as such, the deliberate breakage of such a visually striking stone appears almost iconoclastic. When the buildings at the Ness of Brodgar ceased to be useful, it seems that it was necessary to mark the occasion in very particular ways. Special artefacts were deposited, orthostats were deliberately smashed, entrances were blocked and walls were demolished.

Then, and perhaps most extraordinarily of all, these events were followed by the dumping of several tons of rich organic soil in, on and around the buildings (see below), effectively sealing off the site. At the same time, the ditch outside of the substantial northwest enclosure wall also appears to have been filled in. Within this rubble backfill of this ditch in Trench N were three small incised pieces (SF2642, SF2745 and SF2811; a fourth, SF2698, was recorded but has indeterminate markings). As noted above, fragments and portables are somewhat rare generally at the Ness of Brodgar, and tend to...
occur in specific contexts. As with the fragments from Trench P (Figure 131), the decoration has occurred after fragmentation, suggesting that they were decorated for deposition. Moreover, the incised fragments in Trench N were strikingly different from anything found in that trench, suggesting that their placement was deliberate and related to the act of backfilling, as an act of marking the reinstatement and closure of this part of the site. Comparable processes can be identified across the site, but nowhere as dramatically as in Structure 10, where the discussion now turns.

**The life and death of Structure 10**

In its heyday, Structure 10 at the Ness of Brodgar would have been an imposing stone building of considerable dimensions, which would have been of similar size, and perhaps even external appearance to a chambered tomb. With its large central hearth, dresser and in its internal layout, Structure 10 had elements commonly associated with Later Neolithic *domestic* structures. Nevertheless, its monumental size, the quality of its masonry and its incorporation of standing stones are features which had previously only been found in *funerary* or ceremonial contexts in Neolithic Orkney. It is appropriate, therefore, that the extraordinary series of acts at the end of Structure 10’s life can be likened to *burial* rites.

These started with the placement of a crudely cup-marked stone (SF7407) and a bovid skull in the centre of the hearth, followed by a large-scale dumping of rich organic soil 1321 which filled the interior. This was then sealed with an extensive, deliberate deposit of rubble 1239 (Figure 137), effectively creating a large cairn of rubble. In Structure 8, demolition rubble lies directly above the floor deposits, and as in Structure 12, the refuse layers infilling the building seal the initial rubble spreads. In Structure 10, this sequence is inverted. Refuse-rich soil was laid down first before the rubble deposit - indicating that the demolition debris inside Structure 10 was deliberate, rather than due to collapse.

The amount of rich, organic midden-enhanced soils used to infill all of the buildings at the Ness of Brodgar is extraordinary. In functional terms this would have been an excessive waste of this important agricultural medium and can be compared to the conspicuous consumption and sacrifice that frequently accompanies funerary rites, such as the widespread stripping of turf seen in barrow construction in Bronze Age Orkney (Downes 2009). The analogy with Bronze Age barrow construction might be particularly apposite in this case. At several sites in Orkney, such as those in the Linga Fiold cemetery, cremated bones are at the base of the mound, covered by pyre material, which was subsequently sealed with

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**Figure 136. Incised slab SF15036 with polished stone SF15037, placed as a final act at the end of occupation in Structure 14, the Ness of Brodgar. Image © ORCA.**
intact /stacked turfs, loose topsoil, and then capped by a thick layer of subsoil (Downes 2009, 131). This accords with a similar material ordering within Bronze Age barrows elsewhere in Britain (Owoc 2004) and is seen to represent an inversion of the natural stratigraphy; the reversal of the normal order which is a frequent theme in Neolithic and Bronze Age funerary practices (Downes 2009, 133). The use of soil then stone to close - or lay to rest – Structure 10 represents a similar inversion. If it had been originally covered in turf (as suggested for the buildings at Barnhouse: Downes and Richards 2005), then this inversion would have been more explicit.

The demolition of a building this size would have been quite a spectacle, involving large numbers of people, and rather like the practice of construction, a performative process. The sheer scale of this performance is evidenced by the manner of the large-scale dumping of animal bone around the outside of Structure 10 as part of its decommissioning. Extrapolation from the excavated areas suggests that the entire deposit surrounding Structure 10 represents in excess of 400 individual cattle. The orientation of the cattle tibiae within these layers - piled up against centrally-placed cattle skulls - implied careful placement early on, with deposition becoming more haphazard as the layer built up (Mainland et al. 2014, 874-876). The importance of cows in the Neolithic of Orkney is well-attested by the frequent placement of cattle bones in key deposits in houses, such as cattle skulls laid as a foundation deposit in Structure 9, the Links of Noltland, and those placed as closing deposits in Houses 6 and 7 at Skara Brae. But it is striking that the nearest parallel for the cattle bone around Structure 10 is from an Early Bronze Age funerary context.

Barrow 2 at Gayhurst in Northamptonshire, was the largest of several barrows on the floodplain of the river Great Ouse and excavated between 1997 and 2002. Barrow 2 contained a single central inhumation of an adult male within an oak-lined chamber; the ring-ditch contained a minimum of 300 cattle, comprising mainly limb bones, mandibles and skulls, indicating that deliberate selection of body parts took place (Towers et al. 2010, 509) just as in Structure 10 (Mainland et al. 2014, 874). The animal bone and central burial at Gayhurst were dated to around 2000BC (Towers et al. 2010, 508), some 200 years after the deposit of cattle bone around Structure 10 (Nick Card, pers. comm.).

Given the parallels between the decommissioning of Structure 10 and burial rites, it is telling that several fragments of human bone, including fragments of skull and jaw were found within the contemporary demolition rubble in the forecourt area (Nick Card, pers. comm.). More than representing the passive residue of demolition, the other material caught up in

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**Figure 137. Rubble 1239 in the centre of Structure 10 as first revealed in 2008 (after 5000 years of settling). Image © ORCA.**
the demolition debris filling the structure can also be seen as significant. Within the substantial rubble layer of 1239, were a variety of ‘special’ artefacts, including worked bone tools (SF3625, SF3954), unfinished bone beads (SF3707), a small hollowed stone (SF4161), a polished axehead (SF3014) and two axe blanks (SF3706, SF3948: Ann Clarke pers. comm.), a stone ball SF3943 and a number of decorated Grooved ware sherds. It also contained nine decorated stones. Amongst these, SF3133, the cup-and-ring pecked stone is unique amongst the decorated stone assemblage (Figure 125). I argued previously that the freshness of the pecking of this stone suggests that it may have been decorated shortly before – and probably specifically for - deposition (Card and Thomas 2012, 119). Portable pieces SF3135 and SF3141 may also fall into this category, as do several grinding stones within the rubble fills.

The position of Structure 10 in the overall sequence of the Ness of Brodgar complex is also pertinent. Although there is evidence for small-scale activity for some time after the building went out of use, this appears relatively insignificant and ephemeral compared to the site’s heyday. The decommissioning and demolition of Structure 10 may have marked the end of not only one building, but the whole site. Just as the death of a person allows a community to reconfigure themselves, the ‘death’ of a building, in this case Structure 10, can also provide an important arena for collective thought and reconfiguring of social relations (Buchli 2013, 167).

Robbing and beyond

In Chapter 6, I noted how the buildings at the Ness of Brodgar appear to have been robbed in a quite particular, even ‘structured’ manner, as the choice of what to take, and what to leave behind, seemed not to be directed by either functional or aesthetic concerns. The structured nature of this robbing suggests a subtle knowledge of what lies underneath, and where. This might indicate that a relatively short period of time passed between demolition / decommissioning and the robbing events. This presents us with a paradox. The drama of the demolition and closing events seen across the site, involving the placement of hundreds of animal bones, and the movement of hundreds of tons of soils and stones, suggests a finality to activity, a deliberate conclusion. Yet the structured nature of the robbing suggests that the buildings continued to exert an influence and that the site had a legacy which needed to be mediated. Liking the demolition of a building to a burial rite, however, allows the subsequent process of robbing to be seen in a rather different light. Although robbing is often dismissed as an expedient way to obtain material, the large-scale removal of stone would require the significant coordination and mobilisation of people; like construction, and indeed demolition, it is truly a social performance. The removal of material from the now-redundant, ‘dead’ building may in fact always have been intended, as part of the whole process of negotiating social change through fragmentation and reconstitution.

The large number of fragments of red sandstone recovered from the robbing backfill in Structure 10 may bear testament to the robbing performance. These examples are dominated by corner fragments, but the damage is concentrated in the middle, not the ends or corners of the blocks. Rather than as a result of demolition or collapse therefore, the blocks appear to have been purposefully broken and deliberately deposited during the robbing process. This opens up the possibility that other stones and artefacts found within robbing backfill were not the result of residual incorporation, but had been actively and consciously deposited. In particular, given the importance of red sandstone in terms of its origin, colour and texture, and its particular association with Structure 10, the apparent destruction (rather than removal) and deposition of this material during robbing has to be seen as significant and highly charged.

SUMMARY

In this chapter I have discussed the properties of the stone used in Neolithic art and architecture in Orkney and how these were manipulated and implicated in people’s engagement with these materials. I have argued that the materiality of stone was significant, but also that it was not static. Different variables, such as light, interact with stone, rendering it in a constant state of flux (Ingold 2013, 27-31). In Neolithic Orkney, building stones would have been exposed to a variety of different lightscapes, from their placement during construction, when they would have been in the open air and natural light for a short period of time, to a range of artificial lighting conditions or darkness within enclosed interior spaces (A. Thomas 2014a, 150). This observation has implications for the visibility of stones and their decoration, and suggests that approaches which focus purely on visual form might be misleading. This idea is corroborated by the frequent discovery of decorated stones which might not have been seen at all during the occupation of the buildings - the phenomenon of ‘hidden’ stones. These observations demand a shift away from the visual form of decorated stones to focus upon the process and context of creation, a recognition that stone-carving may have ‘accompanied, and even aided, the performance of particular activities’ (Bradley 2009, 219; cf. Tilley 2004, 215).

Rather than focussing on the final visual appearance of these marks, attention to how they were made allows an exploration of why certain types of working might be appropriate in particular places, and at particular times. This demands an exploration of the range of different
architectural contexts in which decorated and dressed stone is found, and the different stages of construction and inhabitation. In this chapter I explored some of these stages through a series of case studies from the Ness of Brodgar. These vignettes are not exhaustive, but demonstrate that ‘the site’ that we encounter as archaeologists is the result of a diverse and complex range of actions, as architecture becomes meaningful through the process of building (Marchand 2006, 60).

We need to understand Neolithic architecture as an ongoing practice, rather than as a final and completed object that demands a singular interpretation (Bailey and McFadyen 2010, 568).

The architectural process is, of course, also intensely social. Each stage, from quarrying to roofing, would have brought together large numbers of people and materials, which were likely to have been drawn from a sizeable geographical area. The role that cattle bones played in the dramas enacted at the various stages in the life of the site, often in association with other artefacts and decorated stones, opens up the discussion to examine how construction involves complex assemblages of people, stone, wood, soil, animals and more (McFadyen 2006; 2008). Through their associations, these materials would have also allowed different times, places and perhaps even people to be referenced through construction, providing the focus for the formation and negotiation of identities (Chapter 9). Different people may have been involved at different stages of the process - old and young, women and men, children and adults. Certain activities might involve large groups of people, whilst the placing of a foundation stone or closing deposit might be a private act, marked by a small number of individuals. The movement and interaction of these people and materials in the process of building would have been subtly choreographed; whilst construction is not a performance as such, it is certainly performative (Richards et al. 2013, 120).

These different scales of attention are reflected in more discrete acts of stoneworking and decoration. At the Ness of Brodgar, the working and decoration of stone plays an important and active role at each stage of the life of the site, from foundation through occupation, and to demolition and re-use. There are a range of mark-making practices in evidence, from incising and carving, to pick-dressing and cup-marking, but treating all of these as a unitary phenomenon, as ‘art’, belies this diversity. By linking different stages of construction and occupation to different types of stoneworking, it is possible to see the rapid incision of lines as an appropriate form of mark-making for a small group of people involved in wall-building, as in Structure 7. Similarly, the rhythmic action of percussive working becomes entirely apposite in the context of transformative group activities such as the modification of Structure 10. These acts are specific and intimate on one level, but would have formed part of a common practice which was in step with a wider shared understanding about what, where and why different stoneworking activities took place. Closer examination reveals that there are subtle connections between not only different materials and the different processes of working them, but also with the particular temporal and spatial contexts in which they are found. In many ways, therefore, process is implicated in temporality. This will form the focus for discussion in the next chapter.
8. TEMPORALITY

Figure 138. Sequences of Attention on SF8036, Structure 10, The Ness of Brodgar.
Image © Antonia Thomas
TEMPORALITY

In Chapter 7, I discussed the materials that make up the fabric of buildings in Neolithic Orkney, and argued that we should look beyond singular and static notions of architecture to explore how those buildings evolved through process. An exploration of the decorated stonework at the Ness of Brodgar started from the same premise, revealing subtle interplays between process, materiality and context. Different techniques - incising, cup-marking, grinding - emerged as apposite in particular temporal and spatial settings, the working and decorating of stone playing an active role in construction and dwelling. This takes us beyond superficial comparisons of structure and form, to explore the performative effects of stoneworking at a range of scales. As such, it runs against many traditional archaeological (and art historical) interpretations of art and architecture which tend to be predicated upon the ‘logic of final form’, seeing buildings as no more than static containers for action and as stable surfaces for decoration. Central to this problem is how we think about time, and this will form the focus for this chapter.

Archaeologists tend think of time almost exclusively as chronology, as uniform, linear and unidirectional (Lucas 2005, 10). Yet, as the material at the Ness of Brodgar shows, time is implicated in process in many ways. There, even the most substantial buildings existed in an almost-continuous state of becoming (cf. Conneller 2011, 20). A building’s constituent parts took many generations to assemble; these elements, each with their particular biographies, were brought together and superimposed on a site which already had its own deep past and historical associations. The coming together of people also involved reflections upon genealogy, whilst the gathering of materials linked the site to the wider landscape and to ideas of ancestral and mythical time (Chapter 9). The procurement of materials, marking out of alignments and the build itself were probably tied to seasonal and celestial cycles, whilst construction work would have been influenced by the weather and the movement of the sun, perhaps directing which parts of buildings were worked on at particular times.

A similar temporal diversity can be seen in specific kinds of stoneworking. Despite their shared designation as art, incised, carved, ground, polished and pick-dressed stones not only look, and feel, different, but were the result of particular bodily engagements, each with their own rhythms and timescales of creation and appreciation. To reduce all of these to a linear sequence is to miss the very complexity of the processes we wish to understand. What is needed is a more balanced emphasis upon both history and temporality; a sense of the rhythms which allowed art and architecture to emerge, through process.

In this chapter, I will examine the way in which time has been dealt with in archaeology and the implications for our understanding of Neolithic art and architecture. I will argue that archaeology’s almost exclusive focus upon chronology is problematic, and means that many interpretations remain wedded to awkward notions of evolution, origins and progress (González-Ruibal 2013, 10). These both encourage, and are encouraged by, the conventions of archaeological representation, as the way in which time is visualised in archaeology becomes central to the way it is understood. By building upon the discussions started in Chapter 7, I will argue that a more fruitful approach is to understand the temporality of past engagements as constituted through praxis. These issues will be explored in the second half of this chapter through a series of case studies focussed upon the Ness of Brodgar; but first, we need to look at the relationship between archaeology and time.

ARCHAEOLOGY AND TIME

I have suggested that time, in archaeology, is almost exclusively considered as chronology. I will explore alternative ways of thinking about time later on in this chapter, but the following sections will examine the history of the relationship between archaeology and chronology, and the ways in which it is problematic.

Culture, classification and change

In the 19th century, the birth of geology as a scientific discipline led to the recognition of the long antiquity of humanity (deep time). This provided the impetus for theories of Darwinian evolution and a preoccupation with origins which still persists (Gosden 1994, 3; see below). Ideas of stratification and progressive change became familiar tropes across the natural and social sciences, including the relatively new ‘science’ of prehistory (Sherratt 1989, 170). In both geology and archaeology, time became associated with depth, a correspondence which is still seen in the terms Lower, or Upper Palaeolithic (Lucas 2005, 51). The ‘Law of Superposition’, namely that ‘the stratum at the bottom of a series will have been laid down earliest and those above it successively through time from bottom to top’ (Browne 1975, 21 cited in Harris 1997 [1979], 13) provided the basis for the relative chronology of stratigraphy, allowing the artefacts and remains found within particular strata to be ordered relative to one another. Patterns and differences in ‘types’ of artefacts could be correlated with their position on this vertical scale, allowing them to be classified through typology.

With the growth of museums as public institutions in the 19th century, these classificatory schemes became essential to the ordering of artefact assemblages. In Copenhagen, the Danish archaeologist Christian Thomsen undertook the sorting and classification of the
entire collection of the Royal Museum of Antiquities, noting the particular correspondence between artefact types and either stone, bronze or iron weapons and tools (Lucas 2001, 76). Although other scholars had suggested similar systems, it was Thomsen who created the Three Age System as “an intelligible chronology of universal acceptance” (Wilson 1851, 18). This was introduced to British archaeology by Daniel Wilson, and gained significant popularity at a time when the industrial revolution was providing contemporary evidence for progressive technological change towards an age of iron (Lucas 2005, 50).

 Artefacts, building styles and even people could now be easily slotted into ‘types’, allowing the classification of ‘cultures’ across space and time, and providing a paradigm for understanding the whole of human history (Lucas 2001, 78). These ideas had profound social and political repercussions. Works such as Morgan’s Ancient Society (1877) presented a global, evolutionary scheme of human change from savagery to civilization. He classified not only past people through their association with particular ‘types’ of material culture but also used present day exemplars to explain the past (Gosden 1994, 4). For Morgan, progress merely happened at different rates in different places, and all societies, past and present, were placed in the same flow, ‘some upstream, others downstream’ (Fabian 2002 [1983], 17). People who had not ‘progressed’ beyond savagery were ‘survivals’ (Lucas 2005); a term applied not only to indigenous peoples in other continents, but also traditional societies in rural areas of Europe, such as Orkney. The rate of progress appeared to slow down the further from the ‘core’ that people were; time became space, a function of physical distance from the centres of the Anglo-Saxon world (Fabian 2002 [1983], 15; Gosden 1994, 4).

These cultural and social evolutionary schemes impacted on archaeological thinking well into the 20th century. They were particularly influential on Marxist thinking and can be seen in many of Childe’s early interpretations (Richards 1995, 122; Lucas 2005, 12). Thus he could happily discuss ‘survivals of the Skara Brae tradition in modern Scotland’ (Childe 1931c, 182), and make direct links between 20th-century blackhouses in the Western Isles and the prehistoric dwellings he was excavating in Orkney, surmising that in ‘remote parts of Scotland and Ireland … several elements of material culture have persisted among the peasantry unaltered through all the centuries from the Skara Brae period’ (op. cit., 184). When Piggott’s discovery of Grooved ware at Clacton pushed the date for Skara Brae back into the Neolithic (Chapter 3), the village could simply slide back on the linear timescale, its early date explainable by the ‘chronological lag as culture moved northwards’ (Richards 1995, 122). The totalising narrative of culture-history has, of course, long been discredited. But archaeology still adheres to a way of thinking about time as chronology that has its roots in the same intellectual climate, with all its associations of evolution, origins and progress (González-Ruibal 2013, 10). As we will see below, this has particular implications for how we understand prehistoric art and architecture.

**Archaeology and chronology**

Although notions of social stratification and ‘progress’ have long ago fallen out of favour, the early concept of stratigraphy in archaeology has been remarkably persistent. Indeed, until the 1970s, it was understood almost entirely in the same geological terms as it had been since the 19th century (Lucas 2005, 38-39). Throughout the 20th century, however, the complexities of archaeological sequences became increasingly apparent. Anthropogenic processes were seen to ‘transgress the natural laws of stratification’ (Harris 1977 [1979], 37, my emphasis), in two very particular ways: by creating upright deposits such as buildings, and by the human transportation and deposition of materials that may have travelled many miles (Lucas 2012, 83).

It was these observations that led Edward Harris to develop his stratigraphic matrix to follow archaeological rather than geological laws of stratigraphy (Harris 1975, 110). Ironically, however, this was also developed from a discipline outside of archaeology, by adapting quantitative geography’s critical path analysis: ‘the shortest route in time on a one-way path’ (Lucas 2001, 157).

Although originally developed as an interpretive tool, Harris’ matrix is now uncritically accepted to the extent where ‘[t]he stratigraphic matrix now is the archaeological site...a rather arcane representation of the entire process of excavation’ (Chadwick 1998, original emphasis). But time in a stratigraphic matrix is only the measured, abstract time of chronology, a causal chain which shows the temporality of production, not use (Lucas 2005, 39). Although several authors have attempted to expand upon Harris’ matrix by adding temporal dimensions (e.g. Dalland 1984; Carver 1990), these remain focussed upon seriation: linear time and chronology (Chadwick 1998). The problem is the particular conception of time (as linear, evolutionary and spatial) that the stratigraphic matrix encourages and the implications for how we understand archaeological remains. When viewed as a chronological sequence, the constituent parts of an archaeological site become objectified and atemporal (ibid.; Lucas 2005, 40). This gives the impression that human activity, and therefore time itself, is comprised of ‘a sequence of clearly defined architectural objects, a series of “still frames”’ (McFadyen 2013, 141). This is, I have argued, how both architecture and artefacts are often discussed in archaeology, as the static, visual, form of objects at one particular point in time is prioritised over the process by which they were made, placed and appreciated (Chapter 7).
This static view of archaeological events and objects is both reinforced by, and reinforces, the reliance upon typology. The problem arises when typological categories are reified to the point where they are uncritically accepted as a ‘real’ version of the past. With visual characteristics prioritised over other aspects, prehistoric buildings are frequently defined by typological classifications: apparent similarities in structural details which reinforce the notion of buildings as fixed, static entities (Bailey and McFadyen 2010, 576). Carved stones are likewise categorised and understood through typological groupings based on their visual characteristics (A. Jones 2001b, 217). Crucially, these objects have to be removed from their context and reduced to formal qualities in order to be viewed and compared simultaneously (J. Thomas 2008, 8). As such, typological classifications epitomise the Cartesian separation between subject and object; this is the past as ‘other’, seen and ordered through the omniscient lens of the archaeologist in the present (Fabian 2002 [1983], 106; Shanks and Tilley 1987, 133).

Inextricable from this particular conception of the world is the ‘ocularcentrism’ of Western science - the privileging of the visual over the other senses (J. Thomas 2008). With vision as the ‘noblest sense’, knowledge itself is overwhelmingly visualised, reinforcing the temporal separation between subject and object (Fabian 2002 [1983], 106). Three-dimensional artefacts and buildings are translated into two-dimensional decontextualised line drawings, phased plans, sections and stratigraphic matrices (Richards 1993b; Bradley 1997b; A. Jones 2001a). These allow the comparison of the form of objects, artefacts and buildings across a very wide geographical and temporal range, and permit arbitrary judgments relating to aesthetic values and perceived evolutionary developments (Scott 2006, 637). The danger arises when typologies are used to order objects within evolutionary schemes, in which more ‘sophisticated’ designs of art, artefacts and architecture are assumed a priori to be later than ‘simple’ forms. Thus Maeshowe is interpreted as the ‘final achievement’ of the tomb-building tradition in Orkney (Davidson and...
Henshall 1989, 90), whilst the passage grave at Howe is assumed to be even later still, because it appears to be a more ‘advanced’ form of tomb (Ballin Smith 1994, 24).

Similar evolutionary and totalising narratives have dominated discussions of art and architecture in Neolithic Orkney (Chapter 3; below). I will return to this issue later on in this chapter, but for the current discussion it is important to note that, regardless of the resolution, all archaeological chronologies – typology, stratigraphy, radiocarbon dating etc. – share the same linear, spatial and objective conception of time (Lucas 2005, 10). And because archaeology not only depicts time, but also helps create it (González-Ruibal 2013, 14), this has implications for how we understand and represent the past on every level, as these chronologies also contain explanatory potential (Lucas 2005, 13). For example, as a method of periodisation, the Three Age System is widely used as a relative chronology. It may no longer be associated with narratives of ‘progress’, but it nonetheless reinforces the essentialist idea that materials are fixed categories (Connelly 2011, 125).

As an unquestioned and exclusive framework for understanding the past, therefore, chronology is clearly problematic. Of course, archaeology could not function without it, but it needs to be situated as only one of several ways of thinking about time (Lucas 2005, 27). The question, then, is what other ways of thinking about time need to run alongside chronology.

**Philosophy and time**

The ‘single most pervasive component of our experience’ (Sklar 1998, 413), time has been the subject of continuous deliberation since at least the 5th century BC. At the heart of the philosophical debates is the tension between *stasis* and *change* illustrated by Zeno’s famous paradox. This used the example of an arrow in flight - which at any given moment, occupies a single point in time, but is still moving - to demonstrate the fundamental paradox of *aporia* of time. This rests upon the assumption that time is an infinite succession of instants, and so things cannot simultaneously occupy a point and change (Lucas 2005, 19-20).

Aristotle refuted Zeno’s paradox by arguing that time was not a series of instants, but rather an infinitely divisible continuum from past to future, connected by the present as both a point and a line. For Aristotle, time was movement, and as such, effectively reduced to *space* (Lucas 2012, 21), an abstract and objective container for human action (Shanks and Tilley 1987, 120). This was borne out of the Platonic privileging of geometry, ‘the paradigm of the operation of the intellect’ (Lorand 1999, 401), on which the Cartesian dualism between nature and culture was also founded (Chapter 7).

At the start of the 20th century, McTaggart (1908) revisited the *aporia* and noted that there are essentially two types of time: the A-series and B-series. The A-series is *time as continuum* (past-present-future), whilst the B-series emphasises *time as a series of successive instants* (time as a sequence of historical dates). In the B-series, things always occupy the same relative position: they are earlier than/before, later than/after something else, and this quality is *permanent*. But in the A-series, time is problematic, as what was once future becomes present, and then itself becomes past: *it changes* (McTaggart 1908, 458). Something cannot be simultaneously past, present and future, and so the A-series has to be explained in terms of the B-series (Lucas 2005, 21). But humans do not experience time as the succession of points which defines the B-series, and so this experienced time defies simple measurement (Gosden 1994, 2). This distinction between measured time and human time lies at the heart of archaeological discussions of time, as we attempt to understand the human creation of time within a chronological framework created by measured time (ibid.). Recognising its historical specificity, Shanks and Tilley argued that the exclusive ordering of the past as *chronology* imposed ‘a Western valuation of measured abstract time on a multitude of pasts which cannot answer for themselves’ (1987, 136). In order to redress the balance in favour of the social, they proposed a scheme whereby measured (‘abstract time’) and experienced, social (‘substantial time’) were set in opposition (ibid.). However, this effectively reinforced the classic dualism between the A and B series of time. In Shanks and Tilley’s scheme, the social has to be given privilege over an external, ‘natural’ time, thus perpetuating the problematic nature/culture dichotomy (Gardner 2001, 40).

For McTaggart, the co-dependence of the A-series and B-series was contradictory and he concluded that time must be unreal (McTaggart 1908, 458; Lucas 2005, 21). Following McTaggart, Henri Bergson (1910) also acknowledged the paradoxical nature of time, but without considering it any less ‘real’ (Bergson 1910). He argued that the essentially spatial idea of time of both Zeno and Aristotle was misleading because it was merely a *representation* (Lucas 2005, 22); Zeno’s paradox is resolved when it is *drawn* (Barthes 1982, 232-3, cited in Shanks and Tilley 1987, 132). A major part of Bergson’s thinking rests upon the notion that time is not a series of instants, but is *duration*. This might be a particularly useful approach for archaeology, as it focusses upon the materiality of the past as a *palimpsest* of residues rather than as discrete events (Olivier 2001, 61; Hamilakis and Labanyi 2008, 6; Lucas 2008, 61).

**Dwelling and process**

Bergson’s theory was developed by Husserl (1966) in his phenomenology of internal time-consciousness. Using the analogy of a musical tone, Husserl argued that when we hear it, it flows; but when we represent it, we can
only do that through a series of notes. And so it is with time: our consciousness perceives it as flowing - what he termed the *temporal flux* - but we can only represent it as a series of instants (Husserl 1966, cited in Lucas 2005, 22). There is thus a tension between the representation and the ‘essential’ character of time, with the former relegated to a secondary position (Shanks and Tilley 1987, 121).

Husserl’s philosophy of time was developed by his student Heidegger, whose approach to *temporality* has been particularly influential in archaeological considerations of time. Heidegger’s understanding of human being (*Dasein*) ‘stresses involvement or dwelling in the world (mediated through the material equipment of everyday practice)’ (Gardner 2001, 41). The key aspect here is the *everyday practice*, which Tim Ingold termed the ‘taskscape’ of dwelling activities (Ingold 1993, 153). Ingold applied these ideas to archaeological contexts by discussing *temporality* as a means of departing from perspectives which place history and chronology (essentially McTaggart’s A-series and B-series) ‘in a relation of complementary opposition’ (op. cit., 157). Focussing upon the ‘A-series point of view’, he argued that rather than being opposed, ‘temporality and historicity…merge in the experience of those who, in their activities, carry forward the process of social life’ (ibid.). Rather than privileging the ‘social’ as an abstract, mental sphere, this approach foregrounds bodily engagement in the world and understands time as a *mutually-constituted* part of activity (Gardner 2001, 40).

This understanding chimes with several other recent archaeological discussions to time and temporality (Gosden 1994; J. Thomas 1996; Karlsson 2001), and is fundamental to the approach I am advocating here. At the Ness of Brodgar, decorated and dressed stone plays a different and significant role at each stage of construction, and suggests that particular stoneworking activities were apposite to certain times and occasions. This demands a focus upon not only the *process*, but also the detailed *context*, of stoneworking. In the remainder of this chapter, I am going to explore what this means in practice, by grounding the argument in the context of the sites discussed here.

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Figure 140. Distribution of decorated stones around Structures 1, 7 and 11 at the Ness of Brodgar (detail). Image © Antonia Thomas.
ART, ARCHITECTURE AND TEMPORALITY

So far, this chapter has discussed different conceptions of time, both as a medium and as a consequence of human engagement with the world. I have argued that archaeology thinks of time almost exclusively as chronology, and that the linear and spatial understanding of time that this involves is problematic. Through a series of case studies focussing upon the Ness of Brodgar, I will highlight the importance of thinking about time not merely as chronology but as something constituted through praxis, and the need to follow this through in our practices of recording and representation. This approach will be explored through examples of ‘fuzzy stratigraphy’: examples of archaeological activity for which the normal chronological ‘rules’ of stratigraphy and typology, do not work (Chadwick 1998).

Fuzzy stratigraphy at the Ness of Brodgar

In Chapter 6, I noted how certain areas at the Ness of Brodgar appear to have formed more of a focus for decoration than others. This can be seen in a detail of the distribution plot from the site, showing Structures 1, 7 and 11, and the intramural passage (Figure 140). It shows a particular concentration around the southern entrance of Structure 1, where decorated stones are fairly evenly distributed on the left-hand and right-hand flanks of the outer opening. The intramural passage is also densely decorated, with incised stones concentrated on the external wall of Structure 1 to the right of the southern entrance, and on either side of the passage between Structures 1 and 7. This conforms to the wider pattern identified at other sites in Orkney, where thresholds, passages and openings appear to have been afforded special attention (Richards 1991; Bradley et al. 2000). On deeper investigation, however, all is not quite what it initially seems.

Structure 1, southern entrance

Structure 1 appears to have been one of the longest-lived structures in Trench P, and perhaps, unsurprisingly, contains one of the highest concentrations of incised markings on the site. The southern entrance forms a particular focus, with five decorated stones on wall 5156 which forms the right-hand side of the opening. During a secondary phase of modifications, this opening was blocked, possibly at the same time as the construction of the eastern entrance and the shift in focus towards Structure 7/19 during Phase 6 (Daniel Lee, pers. comm.). Most of the decorated stones clustered in this entrance are obscured by this blocking, with one (SF18339) partially hidden (Figures 141, 142). This means that their carving at least pre-dates the entrance blocking.

With stones SF15426 and SF18517, on the left- and right-hand of the opening respectively, the stratigraphy is less clear. These both have incised chevron designs, but these carvings stop short of the blocking, suggesting that they were carved after this later walling was in place. This is interesting, as it indicates that the entrance still formed a focus for marking, even after it was no longer accessible, and suggests that there is a more nuanced sequence of attention afforded to this entrance than first appears. For example, SF18516 and SF18517, which are above one another in wall 5156, and bear very similar chevron markings, actually belong to different phases of activity. SF18516 was likely to have been carved, or certainly visible whilst the entrance was in use, whereas SF18517 relates to a different sort of marking, once the entrance had been blocked. The blocking also contained two incised stones, one of which was hidden, and thus carved during or before construction (SF18044) and one of which faced outwards (SF15382).

The intramural passage

A similar situation emerges when we unravel the context and phasing of the decorated stones in the intramural passage between Structures 1, 7/19 and 11. There is a particular concentration of stones on the wall to the right of the southern entrance to Structure 1 (Figures 140, 143). These initially appear to relate to the intramural passage, which was constructed in Phase 5 (Chapter 6). Some time after Structure 7/19 and 11 were constructed, however, the passage was blocked with 1233, a layer of rubble and soil, probably in Phase 6 or 7. This blocking did not fill the entire passage, but occupied a small section in the middle, in the space between Structure 1 and Structure 11. The position of this blocking has an exact inverse correlation with the distribution of decorated stones; unlikely as a coincidence, and suggesting that the marking on the walls either side of the blocking took place after it was in situ. The carvings thus appear to post-date the use of the passage, and may actually relate to Structure 25, to the south of Structure 1. As we saw in Chapter 7, there is a temporality to the visibility and appreciation of decorated stones which is significant, and as with wall 1129 in the southern entrance, the blocking itself contained a ‘hidden’ decorated stone.

Wall 3079, Structure 8

I have argued that the placement of hidden decorated stones within a building is not a unitary phenomenon: we need to establish at what times they may have been visible or hidden (Chapter 7). An interesting example was revealed within the robbed out walling of Structure 8 at the Ness of Brodgar (Figure 144). Much of Structure 8’s outer walling were robbed out after it went out of use, particularly at its southern end, where the robbing exposed the outer face of the innermost wall within the double wall construction. Central within this exposed
innermost wall – and therefore ‘hidden’ when Structure 8 was upstanding - was SF15782, an unusual drilled and incised stone.

Structure 8 was built around the same time as Structure 1, within what I have termed Phase 3. Its collapse and subsequent partial clearance occupy positions within Phases 4 and 5. To its west, the smaller building of Structure 7 appears to have been built and occupied in Phases 5 and 6. This phasing was determined by stratigraphy, as elements of Structure 7’s walling, and occupation deposits, abut certain parts of Structure 8. Although the outer face of wall 3079 was hidden during Structure 8’s occupation therefore, it was exposed during the occupation of Structure 7. The wall-face containing SF15782 then formed part of the space used by Structure 7. Given the central position of this stone within the exposed walling, and the similarity of its drilled design to others in Structure 7 (e.g. SF7726), SF15782 can be confidently assigned to the occupation of this smaller
building. Rather than being ‘hidden’, it was entirely visible during this later phase. This is problematic, because it means that the phasing of the stone – clearly a primary element in the construction of Structure 8 - is rather different from the phasing of its decoration, which post-dates Structure 8’s abandonment, and relates instead to the occupation of Structure 7. On the basis of its location, SF15782 is recorded within the assemblage for Structure 8, yet its carving and appreciation took place once Structure 8 had fallen out of use, as part of the construction and occupation of Structure 7. The stone is contained within wall 3079, which was constructed during Phase 3; but the carving likely belongs to Phase 5. This is a stone which is ‘out of time’ with its neighbours within the same wall, and ‘out of place’ by being in the wrong structure. SF15782 becomes part of Structure 7 and Structure 8, and belongs to both Phase 3 and Phase 6.

This paradox highlights the fundamental problem of chronology: a surface modification or treatment - whether burning, painting, carving etc. - is not defined as a separate unit under single-context recording (Lucas 2001, 156), because an object or event cannot occupy two points on the sequence equally and simultaneously. There is both a spatial and a temporal disjuncture which has interpretive implications for how we understand art and architecture. This is the main problem of chronology in archaeology, whether elaborated through a phase plan, single-context recording, a matrix or typological attributes; the assumption being that each unit is representative of a single action or event, because its spatial limits also define temporal limits (op. cit., 157).

The discovery of a second ‘hidden’ decorated stone (SF23270), within the same wall in 2015, adds another chapter to this story. SF23270 was discovered when the collapsed outer walling of Structure 8 was removed to allow the excavation of Structure 19. Six courses down in wall 3079, and at a similar level to SF15782, one of the finest stones so far discovered, with a heavily incised and carved banded pattern along its outer edge (Figure 144). Unlike SF15782, however, this stone is not associated to Structure 7, and would only have been visible during the construction of Structure 8. This would give it a terminus ante quem of Phase 3; it may have been carved and placed during construction, like the incised stones within Structure 7 discussed earlier, although, of course, it may have been carved some time before. Although this stone and the carved and drilled SF15782 are less than two metres away from each other, and form part of the same wall, they may have been carved 500 years apart, and have entirely different biographies of creation and appreciation.

**Art and evolution at Skara Brae**

The above examples offer a cautionary tale. They highlight the inadequacy of linear chronologies, in phased plans, matrices and even radiocarbon dates, in dealing with complex architectural features and lived experience in the past. They illustrate the pitfalls of unitary interpretations, for example for ‘hidden’ decorated stones, and underline the need for detailed contextual analysis of placement and phasing. This is, of course, often only possible through excavation, such as at the Ness of Brodgar, but it suggests
that on sites where that is no longer possible, we should be circumspect about interpretations based upon simple chronological schemes.

One such example can be seen in Shepherd’s discussion of the carved stones at Skara Brae (2000; see Chapter 5). Despite recognising the tenuous chronological association of many of the carved stones with architectural elements on the site, a central tenet of Shepherd’s interpretation is that a ‘decorative vocabulary’ developed over the lifetime of the site (2000, 146, my emphasis; Figure 145). In making assumptions about how such designs ‘develop’ – with the implication that designs become more sophisticated through time – the interpretation is essentially evolutionary, with the context of the different pieces shown in Figure 145 becoming secondary. The synthesis falters because it is predicated upon three problematic assumptions: that a stone was carved (just once) and at the same time that it was placed; that its visual form was of overriding importance; and, that this visual form ‘evolves’ to become more elaborate through time.

These assumptions are problematic. We have seen how, at the Ness of Brodgar, even decorated stones from the same contexts may have been carved hundreds of years apart. Different parts of structures can form a focus over varying timescales, and even parts of the same walls see different durations of attention. At a smaller scale, and we will see below, individual stones might also have distinct biographies defined by periods of reworking, obliteration or augmentation of designs and surface effects. But the visual conventions of archaeological chronologies - stratigraphic matrices, plans etc. - are not able to deal with this complexity. They collapse time, and crucially, duration, into a single visual register: compare, for example, the information contained in the matrix and distribution plot shown in Figures 139 and 140 with the ‘fuzzy stratigraphy’ described in the text.

Moreover, in Neolithic Orkney, I have argued that the visual appearance of decorated stones was not consistently important. In some cases, the act or moment of working a stone may have been more significant than its final appearance; in other examples, visibility was shifting and mutable (Chapter 7). Variables such as light interact with a surface differentially, whilst the relationship between the techniques of working and the materiality of the stones also transcended visual aspects. These aspects have a temporal dimension, but it is not possible to represent this in a static evolutionary scheme,
or the ‘freeze frame’ of the two-dimensional line drawing. The representation and ordering of carved stones in this way, again privileges superficial differences of surface and form, whilst the subtleties of material, process and context are quickly forgotten. This then becomes self-perpetuating, as subsequent discussions encourage reliance upon the same criteria based on the illustrations. This might seem inconsequential: it is widely understood that line drawings are schematic, not ‘true-to-life’
representations. But archaeological drawings are not merely objective depictions; they also influence what is seen (Bradley 1997b, 68). And, as we will see below with the Brodgar Stone, a problem arises when they become more than just a representation of the objects of study and become the object of the study themselves. This introduces a further aspect for consideration as the archaeologist as image-maker controls what is represented and therefore, what is known about a particular object.

**Back to the Brodgar Stone**

At the start of this book, I introduced the Brodgar Stone, which was found in 1925. Omitted from Elizabeth Shee Twohig’s otherwise comprehensive 1981 work on megalithic and related art (although she briefly refers to it, unillustrated, in a later article: Shee Twohig 1997), the stone has received surprisingly little attention. Moreover, despite being almost permanently on display since its discovery, when it has been described, certain elements of its style and motifs have been entirely overlooked. This can be seen in way it has been depicted in the few publications in which it is considered (Figure 146).

Richards (1993a) illustrated the decorated edge of the slab as a vertically-oriented line drawing, following the orientation of the current museum display (Figure 146a). In Bradley et al. (2000) the line drawing of the stone is oriented horizontally, in the same way as Peter Leith’s original photograph (Figure 146d); Brown and Chappell (2005; Figure 146c) follow the orientation of Tom Kent’s photograph (Figure 2, Chapter 1). Shepherd (2000) follows the same format as Bradley et al., but the motifs are abstracted from the outline of the stone (Figure 146b). These line drawings appear to be transcribed from different photographs, but each transcription has overlooked crucial characteristics. Accompanying - and apparently overlying - the carvings along the stone’s edge are other, less-noticed, marks. A deep cup-mark has been ground into the cross-and-lozenge band, and several discrete peckmarks can be seen by the banded lozenge design (Figures 147, 148). Despite being quite conspicuous, these have either been ignored entirely, or dismissed as damage (Nick Card pers. comm.).

Curiously, the ground cup-mark, which initially appears to overlie, and partly obliterate the cross-and-lozenge design, may actually predate it. Contrary to most depictions, the carved lines forming the saltires either side of the cup-mark do not actually meet at the point where it has been ground (Figure 148); it is almost as if a space had been left for it. The relationship between these different forms of marking is not straightforward. Additional pecking overlies the carved banded lozenge design. This comprises three discrete peckmarks, arranged in a triangular manner, with a smaller peckmark in the middle of one side (Figure 149a). Any possibility that these marks could be accidental, or due to damage, can be dismissed by comparison with other stones found at the Ness of Brodgar. The same ‘triple-cup’ motif, comprising three pecked, ground or drilled cups arranged...
Art and Architecture in Neolithic Orkney

in a triangular manner, occurs frequently throughout the assemblage (Figure 149). In the case of SF11546 and SF11566 (Figure 149c, d), there is a smaller peckmark between two of the larger ones, as seen on the Brodgar Stone; in SF11566, the pecked motif also overlies a banded design. The pecked and ground working on the Brodgar Stone is clearly deliberate and significant, yet it has never been illustrated or recognised as such and has been entirely overlooked.

In the various depictions of the Brodgar Stone, only one stage of working (and therefore one point in time) appears to have been seen, and represented. Moreover, the line drawings and photographs - the secondary, subjective representations - have displaced the artefact itself to become the prima facie evidence from which other archaeologists construct their narratives. This is a crucial point. Archaeology is a predominantly visual discipline, and is also largely destructive, and so depends upon visual reconstruction; it involves a particular way of seeing, and depicting what is seen (Bradley 1997b, 70). There is thus a fundamental relationship between modes of representation and the way in which time is visualised in archaeology and our understanding of it. This can be understood within a wider anthropological tradition of diagrammatic representation, whereby the ability to visualise a society becomes synonymous with understanding it (Fabian 2002 [1983], 106). Yet many forms of representation in archaeology, from line drawings to stratigraphic matrices, building elevations and phase plans reflect a particular, linear, conception of time. These modes of representation do not just reflect the dominance of chronology in archaeology, but also perpetuate it. We need, therefore, to not only think about time in a different way, but also to follow this through in our practices of recording and representation.

Like the Brodgar Stone, many other stones from the Ness of Brodgar have also been worked, and reworked, on several occasions. This observation highlights several important issues. If a design can be added to, defaced, altered or augmented, it indicates that any ‘meaning’ which lies behind the decoration is not static. These sequences of attention often involve a series of processes,
each with different temporal engagements: a stone may be incised, then carved, then pecked. This disrupts any certainty that decoration might be finished, and that what we see now was ever intended to be the ‘final’ form (cf. Cochrane et al. 2015). This suggests that rather than having a fixed, essential quality, stone was understood as something that was capable of receiving carvings over time. This mutability destabilises any assumptions regarding the perdurance of stone, and stone buildings in the Neolithic. It suggests that we need to look beyond superficial form, as it is one point in time, to investigate process, temporality and context. To do this, we need to explore time as something constituted through praxis: the activity of working stone itself.

RHYTHMS OF ENGAGEMENT

In the last section, I presented a series of case studies focussed upon the Ness of Brodgar. These demonstrate the temporal complexity within apparently simple archaeological features and objects and serve as a reminder that ‘what appears to be even a single event in the past, can actually incorporate a palimpsest of multiple events and timescales’ (Lucas 2005, 38). What is needed is a more subtle analysis that goes beyond a simple chronology, to explore the temporality of human experience and understand time as an aspect of bodily engagement in the world (Gosden 1994, 7). In relation to the art and architecture discussed here, we need to explore how people both created, and were carried through time, by certain stoneworking activities. In particular, we must attend to the different ‘techniques of the body’ (Mauss 1973 [1934]) and rhythms of engagement that different processes involve, to understand how and why they might work in particular contexts.

Process and context

The Ness of Brodgar is the only site in Orkney where we find incised, carved, pecked, pick-dressed and cup-marked stones together, allowing an unparalleled analysis of the significance of these different processes. Close examination of the contexts these are found in reveals a link between particular temporal and spatial settings and ways of working and decorating stone. This takes us beyond superficial comparisons of structure and form, to explore the performative effects of stoneworking and decoration at a range of scales.

Different techniques of stoneworking, of course, each involve very different forms of bodily engagement. This is what Bourdieu termed body hexis, the pattern
of gestures and practical activities which link systems of techniques involving the body and tools, and which are imbued with social meaning (Bourdieu 1977, 87). Thus we might think of incising with a flint tool as a very different activity to making a cup-mark with a hammerstone, or chiselling a stone with a hammer and flint, despite the fact that these are frequently all subsumed under the unitary category of ‘art’. Nevertheless, we also need to be cautious about unitary assumptions regarding these different processes. For example, incising appears in different contexts and phases throughout the life of the buildings. Lines often appear rapidly executed, with a flint blade or flake. In several cases, examination of the marks reveal a jagged, double line - the flint tip has broken, or it is a rough blade. The initial impression for these might be one of rapid mark-making, or casual graffiti, rather than careful execution. Incising could stand alone as marks, but was also used to delineate areas for pick-dressing at Maeshowe, or serve as sketches for deeper carvings, as at Skara Brae and the Ness of Brodgar. Its habitual and convenient nature may have allowed a more widespread usage than some other forms of working, but one which was no less significant. Elsewhere, however, incising is more considered, and real care went into the carving and placement of stones, as in Structure 7, where several stones were incised and placed during construction.

Incising, and the more forceful carving, allows a focussed dedication and a level of skill and accuracy that is not possible with percussive techniques. As such, it was also used for some of the most elaborate and prominently placed stones at the Ness of Brodgar. Even within one technique, therefore, there is a diversity which precludes unitary interpretations. There are different rhythms at play; incising can be rapid and casual, but sharply executed and considered; likewise pecking and grinding is slow and rhythmic, but crude and unfocussed. What is significant is the relationship between process and context.

I have discussed how, at the Ness of Brodgar, particular techniques of stoneworking seem apposite to particular settings. I have also argued that each process of working has its own particular cadence, and would involve different tools and ways of working. Through the use of particular materials, and the learnt knowledge of how to approach certain types of stone, the significance of different ways of stoneworking also radiates out through space and time to link patterns of procurement, places in the landscape and notions of social identity. I will come back to this in Chapter 9, but for the remainder of this chapter, I would like to continue the exploration of different types of working and decoration by looking at the temporality and context of cup-marking, pecking and grinding at the Ness of Brodgar.

**Figure 150. Christopher Gee carving a replica of decorated stone SF23270 with a flint tool.** Image © Antonia Thomas.
Cup-marking and cup-marked stones at the Ness of Brodgar

Across the Ness of Brodgar, cup-marked and pecked stones are found in very particular contexts (Chapter 6). In Structure 1, a cup-marked monolith was inserted into the Phase 1 hearth as part of the later modifications; in Structure 12, the rebuilding of the subsided southwest wall included several cup-marked stones. Two portable cup-marked stones (SF9233, SF10116) were also found close by one another within the rubble filling Structure 12’s east entrance, a significant location which I have argued as suggestive of votive deposition (Figure 151). Pecked and ground cup-marks also feature heavily in the annexe of Structure 10, both on the standing stone and several large adjacent stones, and in the demolition debris filling the interior.

Many of these contexts represent later phases of activity on the site, but the pattern reflects more than just a late ‘style’ of art. In each of the contexts described above, and elsewhere at the Ness of Brodgar, cup-marks appear in association with events of change and transformation: where building orientations have changed, new extensions have been constructed, or collapsed structures have been rebuilt. This association can be most clearly seen in Structure 10, which has the densest concentration of cup-marked stones on the site.

In Chapter 7, I suggested that the end of Structure 10 can be thought of as the ‘death’ of the building, and that the events surrounding its decommissioning can be likened to funerary rites, with particular parallels to be found with Early Bronze Age barrows. This decommissioning started with the placement of a crudely cup-marked stone (SF7407) and a bovid skull in the centre of the hearth, followed by the dumping of midden-enhanced soil and an extensive deposit of rubble. More than just the passive residue of demolition, I have suggested that the material caught up in this rubble was significant. It contained a small hollowed stone (SF4161) and several other decorated and worked stones, including five cup-marked stones, one of which (SF3133) was freshly-pecked with a cup-and-ring pecked motif (Figure 125, Chapter 7). As part of this closing process, vast quantities of animal, chiefly cow, bone was deposited around the perimeter of the building, an act which finds its nearest parallel in Early Bronze Age barrows such as Gayhurst in Northamptonshire (Chapter 7). This analogy is appropriate, as the deposition of animal bone around Structure 10 may have occurred as late as 2200BC (Nick Card, pers. comm.). This date would, in other parts of the country, quite happily sit either within the ‘Bronze Age’, or the ‘Chalcolithic’ (Downes ed. 2012); a further indication, perhaps, of the explanatory potential and problems of chronologies and periodisations.

I have suggested that across the Ness of Brodgar, not just the placement of the stones, but also the act of cup-marking itself, appears to be connected to times of transformation. The death of Structure 10 represents the greatest transformation on the site, and as such, the inclusion of several cup-marked stones in the demolition rubble is highly significant. Given the chronology for this act, I would now like to explore suggestions made by Blaze O’Connor that, in the case of many Bronze Age funerary contexts, portable cup-marked stones were deliberately produced for deposition (O’Connor 2010, 157).

Portable cup-marked stones form a major part of the known rock art in many parts of northern Britain, where

Figure 151. ‘Portable’ cup-marked stones from Structure 12. (A): SF9233; (B): SF10116.
Image © Antonia Thomas.
they are frequently deposited into burial monuments (Vyner 2007, 91). The practice of incorporating single cup-marked cobbles into cairns has been observed at a number of sites in Northumberland, including the Early Bronze Age barrows of Weetwood and Fowberry (Beckensall 2002, 65) and Hunterhead (Waddington et al. 2005). All of these appeared to have been carved at the time of the construction of the kerb, and have been interpreted as ‘tributes from individual mourners who built them into the cairn at the funeral’ (Deakin 2007, 113). In all of these examples, the cup-marked stones are unweathered, suggesting a direct link with the funerary ritual itself (Vyner 2007, 103). In a burial context, the working and deposition of cup-marked stones would have given ‘physical form to the process of remembering, mourning and laying to rest, enhancing the efficacy of such practices’ (O’Connor 2010, 157).

Although architecturally-situated rather than on portable stones, a similar process may be in evidence when cup-marked stones are found within the structure of funerary sites. Although relatively rare within Neolithic contexts, cup-marked stones do appear, for example at the long barrow at Dalladies, Kincardineshire (Piggott 1972). They are more common, however, in Bronze Age contexts. At the Balnuaran of Clava, at least some of the cup-marked stones were decorated before incorporation, including those in the corbels of the two ‘passage graves’ (Bradley 2000b, 45).

The cup-marking seen in the later phases at the Ness of Brodgar can be seen as a local variation on a practice that was widespread across Britain and Ireland in the 4th and 3rd, but particularly later 3rd, millennium BC. As an activity associated with the transition from life to death in funerary settings, cup-marking perhaps provided a context for mediating other forms of transition (cf. Kirk 2006, 338); hence its association with events of architectural transformation at the Ness of Brodgar. There appears, therefore, to be a relationship between particular rhythms of engagement and much wider social performances. This demands attention to not only the context in which various stones are found but also the process of their working. As we will see below, this is emphasised by the correspondence between the deposition of certain ‘functional’ stones from the Ness of Brodgar, and their decorated counterparts.

*‘Functional’ stones at the Ness of Brodgar*

In Chapter 6, I noted how, at the Ness of Brodgar, the appearance and form of working of several ‘worked’ stone is strikingly similar to some of the ‘decorated’ cup-marked stones. Close examination of the manner and contexts in which these stones are deposited blurs the distinction further. The rubble filling the forecourt area of Structure 12, contained a small multi-functional stone block SF7142, with a grinding depression on one face, and a mortar SF11060; this also had a non-functional cup ground into its edge. These stones, both of which had been heat-affected, were found near a cup-marked slab (SF15637). As with Structure 10, the demolition of Structure 12 was deliberate, and included the purposeful deposition of both ‘decorated’ or ‘functional’ stones. In some cases, the overlap between decorated and functional stones was aesthetic, as is the case with polissoir SF11268 (Figure 152). This triangular, heat-affected sandstone is superficially similar to some of the decorated pieces from the site (e.g. triangular red sandstone SF15961), and had been deliberately deposited within the rubble filling the interior of Structure 12.

In many cases the overlap between ‘worked’ and decorated’ stone extended beyond appearance - although this may also have been important - to almost identical patterns of deposition. This was most apparent in the case of grinding mortars, many of which were initially recorded as cup-marked stones. The confusion was understandable. The greatest concentration of grinding mortars was found in Structure 10, with a significant number also in Structure 12 (Figure 153). The same contexts with cup-marked stones frequently contained grinding mortars. Moreover, mortar SF11060 (Structure 12) has a cup pecked into its side; whilst mortar SF4308 (Structure 10) has several crude peckmarks along one edge. In Structure 10, several grinding mortars were found, apparently in situ, in the northwest corner (SF8341, SF8836, and SF9855). This area was used in a later stage of occupation for the production of pigments, and the mortars were found in association with ochre and haematite, but two further grinding mortars were found with the rubble deposit 1239 which filled the interior (SF4308 and SF6376) and were deposited with the decorated stones described earlier.

Elsewhere on the site, in Structure 1, a grinding mortar with working on both sides (SF8002) was deposited within the rubble blocking the drain exiting the western end of wall 1224. A similar piece (SF9080) was deposited within the rubble filling the eastern entrance of Structure 12, close to where the two portable cup-marked stones SF9233 and SF10116 were found. The correlation between these ‘different’ stones and contexts of change and closure is striking. This pattern suggests that the material within these rubble and soil layers represented more than passive, unconsidered, discard, and was actually implicated in the performance of demolition (Chapter 7).

Across the site, therefore, certain worked stones appear to have had an ontological significance which made it appropriate for them to be deposited with, or in a same manner to, decorated pieces – and in particular, cup-marked stones. As we will see below, this pattern is reflected in a range of Neolithic and Bronze Age examples from across Britain and Ireland, with worked stones,
especially those associated with grinding and polishing actions, often deposited in very particular ways. This has been recognised in the case of quernstones, which are frequently found deliberately broken, deposited as grave goods and in key locations in both funerary and domestic sites (Graefe et al. 2009; Watts 2014b). In several cases, these have also been cup-marked.

Three cup-marked quernstones were found within the Early Bronze Age Weetwood Cairn in Northumberland (Mazel 2007, 242-243). Several examples are known from North Yorkshire. A saddle quern marked with a single cup-mark was found next to Lingmoor Barrow, whilst pecked and cup-marked stones were found with the kerb and covering the central cremation pits (Brown and Chappell 2005, 120). A stone with a carved comb-like pattern, cup-marks and a grinding surface was deposited amongst several cup-marked stones at the broadly contemporary Hutton Buscel Barrow 2 (Brewster and Finney 1995). Amongst the large number of portable cup-marked stones recovered from the palisaded Later Neolithic / Early Bronze Age monument known as the Street House ‘Wossit’ at Loftus, were five with grinding surfaces; three querns and a polissoir were also found in association (Vyner et al. 1988, 189-194). Just a few hundred metres away, at Hinderwell Beacon, over 300 marked stones were found including many cup-marked stones and several grinding and polishing slabs; this large mound contained several cremation burials associated with food vessels and appears to date from the end of the 3rd millennium BC (Hornsby and Laverick 1920).

Outside of England, two cup-marked stones, one a grinding stone which was subsequently pecked with two circular peckmarks, and one with opposed hollows, were found covering cut burial features at Broich Road, Crieff, Perthshire. These were associated with barbed-and-tanged arrowheads and a cordoned urn burial (Ann Clarke pers. comm.). Also at an Early Bronze Age site, at Carn More, in County Louth, Ireland, a cup-marked stone and a grinding stone were found adjacent to one another within cairn material overlying a central burial cist (O’Connor 2010, 153). Somewhat earlier is the polissoir which was deliberately-deposited at the base of the chambered cairn at Gwernvale in Powys (Britnell and Savory 1984, 132), which saw intermittent opening and re-blocking, perhaps over some 600 years, from its construction at the end of the 4th millennium BC (RCAHMW 1997, 56-60).

These are just some of a wide range of examples which demonstrate the association between cup-marked stones and ‘functional’ pieces; sometimes polissoirs, querns

Figure 152. SF11268, polissoir from Structure 12, Ness of Brodgar. Image © Antonia Thomas.
Figure 153. Grinding mortars from Structure 10 and 12, the Ness of Brodgar. Image © Antonia Thomas.
and grinding stones are cup-marked themselves, whilst in other cases, they are deposited together. The link between the deposition of grinding mortars and cup-marked stones at the Ness of Brodgar therefore reflects a broader correlation seen in many Neolithic and Bronze Age sites across Britain and Ireland. This pattern suggests an ontological equivalence between these different stoneworking acts that ‘somehow made these objects appropriate foci for special depositional acts’ (O’Connor 2010, 158). As I will suggest below, this connection lies in the transformative process of working the stone itself.

**Process and transformation**

At both the Ness of Brodgar and the funerary sites discussed above, there is a correlation between different scales of attention: the act of working an individual stone, and wider architectural and social processes. To understand this relationship, it is helpful to explore what techniques of the body are involved, and why they would be appropriate to these particular contexts. As a form of incorporated bodily practice (Connerton 1989), percussive acts of pecking, pick-dressing and grinding require considerable bodily attention and mental concentration (Lamdin-Whymark 2011b). The repetitive action of grinding makes the passage of time manifest (Fendin 2006; Watts 2014a, 49), whilst completely engaging its enactor through rhythm, sound, sight and even smell.

In Chapter 7, I noted how transformation - particularly through the grinding and polishing of stone - appears to have been a key structuring metaphor in the Neolithic (Cooney 2002; Cummings 2002). Quernstones, grinding mortars and polissoirs are all tools of transformation. Making rock art, grinding food or mineral ores, and sharpening axes all involve similar bodily gestures (O’Connor 2010, 158). Each involves transformative processes and the transmutation of one substance into another, whether in the production of food to eat, pigment to paint with, or even tools to work with. This transformative aspect makes them appropriate for times of social transition, and may explain the frequent association between percussion and rites of passage seen in many cultures (Needham 1967, 611). It is these types of repetitive embodied gesture which Connerton described as having a notational (in distinction to a referential) meaning: they ‘enact bodily the pauses, intensities and inflections of the corresponding speech sequence’ (Connerton 1989, 81). And in many societies, the act of grinding provides a context for learning and the transmission of important ideas (O’Connor 2010, 154-8); ‘a way of telling a story’ (cf. Bradley 2000, 127). The acts of grinding associated with those times of transition would have allowed this story to not only be told, but also remembered, as the reworking of movement, orientation and access wrought by the architectural changes in Structures 1, 10 and 12 at the Ness of Brodgar reflected broader shifts in the worldview of those who used those spaces.

Accepting the link between the cup-marking of certain stones at the Ness of Brodgar, and times of architectural and social transformation, might explain why this form of working appears only at certain Neolithic sites in Orkney. Most cup-marked stones known from Orkney are not in their original setting, for example, those at Midhowe Broch, or Quoys, Hoy (Chapter 3). But at Howe, Stromness, a stone with several cup-marks formed part of the modified entrance into the chambered cairn (Ballin Smith 1994, 13). Like the examples from the Ness of Brodgar, its creation and placement references the transformation of the building - from Early Neolithic house to Late Neolithic tomb.

On a wider scale, of course, cup-marked stones are one of the most ubiquitous types of stone-marking in the world. They have a wide temporal and geographical distribution and the context of their creation, placement and appreciation is accordingly diverse. I have argued that in many of the examples discussed here, meaning was created through practice. In the relational worldview of the Neolithic, the qualities of things were fluid, and context-dependent: and so can be very different in different times, settings and places (Bell 1997, 82; Herva 2010, 443). Nevertheless, in the very particular contexts described here, there is a striking correlation between processes of percussive working and times/places of transformation. With quernstones, the transformation through grinding from one physical state to another, can be interpreted as providing a metaphor for the transition between life and death, and from death to rebirth (Watts 2014b, 60). In the creation of non-functional cup-marks, the powerful transformation of the rock’s surface, colour and texture is made explicit through working (Lamdin-Whymark 2011a). By extension, not only the practice of working the stone, but also the worked objects themselves, would come to be associated with these powerful ideas (O’Connor 2010, 158).

In the contexts I have described above, therefore, the role of memory is two-fold. Firstly, the actions of grinding and cup-marking are used as a way of allowing certain ideas to be remembered, or rather inculcated, in those undertaking the stoneworking as a form of ‘incorporated memory work’ (Connerton 1989). Secondly, these stones - and ones with similar markings - appear to have served as a mnemonic for those ideas long after the stoneworking took place. There is a relationship between body and memory which is worked into and through the stone.
**Body and memory**

In Chapter 7, I discussed the significance of stone as a material. Whilst we should not assume that these were the qualities which it was chosen for (Conneller 2011, 82), stone’s ability to be both durable and malleable both allows it to be symbolically related to the past and to ancestors (Parker Pearson and Ramlisolina 1998), but also open to new interpretations (Cooney 2008, 203). This allows it to be linked to notions of memory and monumentality, at the same time as allowing it to play an active role in the creation and negotiation of identities (O’Connor and Cooney 2010, xxii).

In this chapter, I have argued that the process of working stone - in particular pecking, cup-marking and grinding - would have served as a form of ‘memory work’, the conscious sensory and bodily enactment involved in remembering (Hamilakis and Labanyi 2008, 12). I have also suggested that certain worked and decorated stones acted as a mnemonic for those ideas. At the Ness of Brodgar and Maeshowe, the procurement of different types of stone and other materials for use in buildings extends these links out into the wider landscape, to locales which may be associated with particular communities. The significance of these places may have been mutable and even contested, as different groups lay claim to them at different times during the seasonal round (Edmonds 1997, 101). Collective and personal memories and associations would be reinforced through the practice of working stone (Hamilakis and Labanyi 2008, 10-11). Through a process of ‘citation’ (cf. Butler 1993), other times and places are referenced through the bodily engagement of the memory work involved in building with, and working stone (J. Thomas 1996, 520). In Neolithic Orkney, this everyday, practical engagement allowed the development of particular stoneworking practices which were both rooted in the wider landscape, and implicated in the construction of social identity. This will be discussed in Chapter 9.

**SUMMARY**

In Chapter 7, I discussed the different stages that are involved in the chaîne opératoire of building construction. These did not form discrete ‘events’, but can rather be understood as part of a continuous practice encompassing processes of differing durations. In this process, time was not marked out simply as a clear succession of happenings but instead was interrupted by significant gaps and delays that were then followed by intense activity (Bailey and McFadyen 2010, 378). This presents a rather different narrative than that usually proposed for prehistoric architecture. The form of buildings has often been seen as designed and static, ‘ready-made spaces designed to facilitate social action’ (Pollard 2013, 180), an interpretation which particularly haunts discussions of ‘monumental’ forms, such as Maeshowe. Despite long established arguments to the contrary (e.g. Evans 1988; Edmonds 1999) architecture is still largely understood by conflating the idea of design in plan with the record of a surviving form, collapsing the whole complex actions and time-depth of the chaîne opératoire into the ‘frozen register’ of the plan drawing (McFadyen 2013, 137).

This prioritisation of form over process can be understood as part of the Cartesian dualism between culture and nature. This same dualism has structured the way in which archaeology has dealt with time, and shaped archaeological interpretations of culture change and prehistory (Lucas 2005, 2). This has resulted in two key, and inter-related, issues of interpretation. The first of these concerns the heuristic constraints caused by the linear conception of time within archaeology, with its associated evolutionary perspective and roots in modernist, Western thought (J. Thomas 2004; Lucas 2005). This is reinforced by the classificatory divisions imposed on archaeological site-histories through stratigraphy (Bradley 2002, 152), which prioritise the date of creation over the chronology of appreciation (Barrett 1999, 22).

This has had far-reaching consequences for the ways in which prehistoric art and architecture is encountered, interpreted and reconstructed, most notably through the way in which discussions have focussed upon chronology. These allow little scope for the subtleties of temporality or the lived experience of stoneworking and building: art and architecture become static, reduced to something that has to be understood chronologically, whilst the practice of archaeological recording and illustration reinforces the dualism between ‘measured’ and ‘experienced’ time. We need to recognise the historical specificity of chronology, and understand it as a heuristic device rather than a neutral given (Shanks and Tilley 1987, 119). Of course, without some sort of chronological framework, archaeological interpretations become abstract and meaningless, and greater resolution in dating has fantastic potential for understanding the lived experience of the past (Whittle and Bayliss 2007; Whittle et al. 2008). But we need to be aware that the static, linear timescale of archaeological chronology is only one way of thinking about time, and that its implications for understanding the past can be problematic.

In this chapter, therefore, I have instead argued for an understanding of time as temporality, created through the enactment of various activities in the process of dwelling (Ingold 1993, 153). This is not to call for an approach which obviates chronology entirely, but one in which it does not form the dominant framework for understanding art and architecture, and which recognises the complexities of wider temporal engagements. At the Ness of Brodgar, this can be seen in the correspondence between cup-marking, grinding
and pecking and times of ‘change’ on the site. I have argued that the particular rhythms of these processes allowed a form of incorporated memory-work to take place which made the passage of time manifest through group activity.

The significance of all of these temporal engagements, however, is not restricted to the buildings themselves. It radiates out from the site to the wider landscape through the use of particular materials, many of which were transported to the locations where we recover them (cf. Richards 2013, 3-4). Through their geographic associations, these materials would have allowed for the materialisation of memories of place and people, perhaps linked into wider genealogies and histories. There are thus a range of further temporalities hinted at through all these discussions, and which link the embodied processes of stoneworking - the art and architecture which is the subject of this book - with not only a far wider temporal and geographical context, but with the construction and negotiation of social identity. These ideas will form the focus of the next chapter.
9. CONTEXT

Figure 154. SF16189 during excavation, Structure 12, Ness of Brodgar.
Image © Antonia Thomas
INTRODUCTION

In Chapter 7, I discussed the loose sequence of events involved in the construction process, from quarrying and extraction through to demolition and robbing. At the Ness of Brodgar, I have described how at each stage of this process, in all types and phases of contexts across the site, we find decorated and dressed stones. This allows us to engage with the question of when the particular stones within the buildings might have been carved, and explore the longer biographies of both buildings, and their constituent parts. As such, I have argued that the architectural setting of Orkney’s Neolithic art is its crucial characteristic. But at Maeshowe and the Ness of Brodgar, the selection of particular types of stone for working and building brings a much wider context into the discussion. The procurement of raw materials required journeys to specific places and engagements with the world beyond the site.

In this chapter I will examine the broader implications of the journey - the chaîne opératoire - that stone takes from the landscape to become architecture and art. I will argue that, in the Neolithic, people understood their world through a relational, animistic ontology, and that the fragmentation and reassembly of parts of the landscape through the quarrying of stone and construction of buildings took on a rich significance. The buildings comprised of that stone can be seen to both constitute, and be constitutive of, a wider, animate world. At each stage of the construction process, the social nature of stoneworking would have linked people with landscape and materials, providing the focus for the formation and negotiation of identities. A relational perspective also has the advantage of allowing the dichotomy between nature and culture to be collapsed. This dualism has not only compelled traditional accounts of art and architecture to privilege form over process, but has also translated into a particular understanding of temporality, which polarises ‘natural’ (objective, measured) and ‘human’ (subjective, experienced) time. Both accounts are predicated on a separation between subject and object, which requires the ‘untouchable’ past to be ‘translated’ by an archaeologist-observer in the present.

Throughout this book, I have argued for a more nuanced understanding of Neolithic art and architecture, which explores the way in which temporality was socially enacted through different stoneworking activities. As such, a strict separation between ‘experienced’ and ‘measured’ time, or indeed the present and the past, becomes hard to maintain (J. Thomas 1996, 61; Lucas 2005, 36). This demands exploration of not only the ongoing biographies and ‘afterlives’ of the art and architecture discussed in this book, but also the role played by archaeologists in the construction of narratives in the present. We must also consider contemporary discovery and recording, and the implications for management, curation and interpretation. By exploring the broader links between landscape, architecture, art and time in Neolithic Orkney, this chapter will expand the discussions initiated in Chapters 7 and 8 to explore the ways in which context, in its broadest sense, comes to bear upon the decorated and dressed stone discussed here.

ARCHITECTURE AND LANDSCAPE

In Neolithic Orkney, stone was encountered in every sphere of life (cf. Cooney 2008, 210). Building stone was wrought from outcrops, dragged across the land, faced and dressed, carefully (and sometimes not so carefully) laid and marked in a variety of ways. It was robbed, removed, demolished and fragmented. Often it was re-worked or re-used. It was chosen, ground and flaked, shaped and polished into ornaments and tools; both ‘special’ artefacts and everyday instruments for an incredible array of daily tasks: preparing skins, heating water, cutting wood, decorating pottery, eating food, ploughing soil and much more. Ways of working stone would have therefore been so habitual and ingrained as to be almost subconscious. At the same time, patterns of procurement linked site histories and artefact biographies with wider narratives, referencing different times and places in the landscape. Stone was ubiquitous and its working commonplace, but it would have been weighted with history and geography though its material associations (O’Connor 2010, 159). It is through this lens that stoneworking and decoration - the art and the architecture discussed in this book - need to be viewed.

This narrative allows a richer picture to emerge of not just the buildings as we see them today, but also the processes by which they came to be built. At the Ness of Brodgar, decorated and dressed stones are found in a range of contexts. As such, they demonstrate that the working and marking of stone played an important and active role at each stage of the life of the site: from foundation through occupation, to demolition and re-use (A. Thomas 2014b, 19). We need to look beyond the ‘finished’ product of a building to explore the richness of the construction process which allowed it to emerge (cf. Richards 2013). This demands a focus upon the transformative journey that rock, or stone takes from the landscape, to buildings, and artefacts; an approach predicated on the concept of the chaîne opératoire (Lemonnier 1986; Leroi-Gourhan 1993; Dobres 1999).

The chaîne opératoire

The chaîne opératoire refers to ‘the entire sequence of technological actions: from the gathering and selection of raw material, through manufacturing, use and recycling, to abandonment’ (Conneller 2011, 17). By focussing on the process of making rather than the finished
item, it provides an ideal concept for a discussion of the biographies of buildings and monuments (Owoc 2007). The value of the chaîne opératoire rests upon the observation that practices of working are not only socially significant, but reflect patterned choices which were made as part of the wider material world in which they were developed and enacted (Boivin 2008; Conneller 2011).

At the Ness of Brodgar and Maeshowe, processes of construction radiate far beyond the buildings themselves (cf. Richards 2013, 3-4). Rather than static monuments,
these buildings become ‘hybrid configurations of moving actors: materials, construction techniques, builders, designers, environmental forces and events’ (Allen 2014, 170). The particular histories and geographical connections of these elements would be redolent of different places, people and social ideas and values (O’Connor 2010, 159) and these would be reinforced ‘through the physical enrolment of bodies engaged towards one another during site building’ (Owoc 2007, 116). As such, the processes of construction also allow certain ideas and values to be materialised, and may be implicated in the formation and negotiation of individual and group social identity (ibid.).

Given the social, and context-specific nature of these engagements, Conneller suggests a more ‘rhizomatic’ (sensu Deleuze and Guattari 2012 [1980]) chaîne opératoire to allow temporal processes and variability to come into the equation (Conneller 2011, 19). Central to this notion is the observation that materials are always in a state of becoming (Dobres 1999, 3; Conneller 2011, 20). In this sense, it is helpful to think in terms of assemblages, entanglements or ‘meshworks’ of people, animals, places, things, materials (Ingold 2006, 13; Pollard 2013, 192). This breaks down any notion of technology (in its broadest sense) as static, and instead sees it as a ‘continually unfolding process of social,
meaningful and sensual engagement … engendered by social agents in their everyday activities’ (Dobres 2000, 61). More than a heuristic device for discussing a sequence of technological actions, the *chaîne opératoire* allows the exploration of the role that material culture plays in the formation of social identity through embodied practice, and how that practice allows the engagement with a wider ‘meshwork’ of materials, taskscapes and human and non-human actors. I will develop these themes in the following sections.

**Materials and meshworks**

At the Ness of Brodgar, but also at Maeshowe, specific types of stone, from different parts of Orkney, were strategically selected, worked and incorporated within the buildings (Figures 155, 156). This observation demands that we go beyond the mere description of the materials and their materiality to consider the significance of the places where they originated (Bradley 2000a, 35). I have already noted how the red and yellow sandstones at the Ness of Brodgar were quarrried and transported from several kilometres away from the site. The use of particular types of stone in the Neolithic was certainly far from expedient (contra Burl 2000, 44) and the knowledge of outcrops and sources reflected in patterns of stone procurement indicate a familiarity with particular places which would have built up over generations (Edmonds 1997, 101).

The significance of these stones may be due to their source location or reference the journey of procurement, or they may have become special through the materialising act of quarrying itself (Conneller 2011, 78; Richards 2013, 26). Ethnographic analogies suggest that the symbolic value of stone may relate to the power of the ancestral beings who created the landscape, including the quarries and outcrops, or may reside in its aesthetic or mechanical qualities, in the power of people who quarried and worked it (cf. Taçon 1991, 194).

This pattern of activities would have formed the ‘taskscape’ (Ingold 1993, 153) of the lived world in Neolithic Orkney. It would have involved multiple temporalities from the momentary to the mythical, and geographical references both nearby and distant. The significance of these would not have been fixed, and they may have been mutable and even contested, as social groups lay claim to particular places at different times during the seasonal round (Edmonds 1997, 101). Through the incorporation of a wide range of materials - stone, soil, wood etc. - within buildings, different times and places were referenced, or cited (Kirk 2006) through construction. The memory of these gatherings would endure long beyond the immediate act of building (Edmonds 1997, 103). The pattern of influences which come to bear on a single site are therefore complex, multi-layered and multi-temporal, and it is useful to think of Neolithic landscapes through a relational ontology. This situates human activity within a ‘meshwork’ (Ingold 2006) of broader interactions between human and non-human actors, minerals and elements, technologies and energies that link different times and places (Pollard 2013, 185). It allows an exploration of the more rhizomatic *chaîne opératoire* proposed above (Conneller 2011, 19), and collapses the subject-object dichotomies which have dominated much of post-Enlightenment scientific thought (Alberti and Bray 2009, 339). In Neolithic Orkney, a relational ontology is hinted at by the apparent fragmentation and likely circulation of many human remains before deposition in tombs, and the inclusion of animal bones and particular assemblages of artefacts within specific architectural contexts (A. Jones 1998). Human remains were formally buried at Skara Brae, yet appear only as discarded fragments at the Ness of Brodgar. At the Links of Noltland and the Ness of Brodgar, the considered deposition of discrete, mixed assemblages of carved and polished stones with animal bones in foundation contexts suggests a significance beyond their normative status. In relational thinking, organisms and things do not have an essential nature but are continuously coming into being in their ongoing relation with the world (Ingold 2006, 9; Herva 2009, 388; 2010, 443). There is a two-way relation and sociality between humans and non-humans: including animals, artefacts and geological features (Herva 2010, 443). Seen in this way, landscapes, buildings and even individual objects and materials cease to be static, and instead become part of a heterogenous and constantly evolving assemblage. They become alive (Pollard 2013, 185). Nonetheless, these qualities would have been neither mutually exclusive, nor fixed; as we will see below, they would have been relational, and context-specific. Neither was stone used in isolation. The collection of other materials, both for building and maintenance of structures, would have also required journeys to particular places: stands of trees for timber, western beaches for driftwood, pigment ores and other minerals from specific sources, and food, water and fuel to sustain the community.

I am suggesting that Neolithic Orcadians might have understood the world through an animistic ontology, not in its 19th-century sense to refer to the simple imparting of life to non-living things, or a belief in spirits (Tylor 1913 [1871]), but as an awareness of ‘the myriad multiplicity evident everywhere’ (Harvey 2005, xiv). By seeing animism as a form of relational thinking (Bird-David 1999), it can be repositioned not as a ‘way of believing about the world but…a condition of being in it’ (Ingold 2006, 10, original emphasis).

**Architecture and animation**

I have suggested that prominent landscape features, such as outcrops or quarries, might have been seen
as alive. It follows that the stones taken from these places would be imbued with some of the same special qualities (Bukach 2003, 23). The fragmentation of the animate landscape, and its re-assembly and transformation through the construction of buildings would therefore signify a new phase in the biographies of the constituent materials (cf. Gell 1998, 229; Herva 2010, 444). During construction and occupation, the bringing together of these different elements would have sparked memories and associations of particular locations and social groups. Buildings would become the embodiment of the people who built them, and the processes of quarrying and construction (cf. Richards 2004a). Particular stones may have served as ‘a kind of social and ritual mnemonic, the visual and tactile qualities of the stones connecting people with place, and that in turn with ideas, beliefs and memories’ (Scarre 2004, 200). These may have had animate qualities that they brought with them from their source, or the act of carving the stones and placing them as part of construction may have animated both the fragments and the buildings (cf. Herva 2010, 445).

At the Ness of Brodgar, there are several indications that the buildings were indeed considered animate. I have already argued that Structure 10 itself was effectively ‘killed’ and buried during its demolition (Chapter 7). This suggests that it was considered to be ‘living’ in the first place, as to kill a building ‘is to attribute it with an animacy beyond its normative objective status’ (Buchli 2013, 168). I have suggested that Structure 10’s demolition could be likened to a burial rite and that this allows us to re-examine the nature of robbing, and see it as part of the continuing process of negotiation and reconstitution. The demolition and fragmentation of a building allows possibilities for salvage and the collection of relics, allowing for it to be redistributed in a different form (op. cit., 167).

Evidence from other structures at the Ness of Brodgar suggests that this fragmentation, salvage and redistribution was charged with meaning. In Structure 7, four trimmed flat slabs (SF3940, SF4718, SF15280 and SF15921) in the levelling floor layers appear to have been re-used, discarded roof slates from the adjacent ruins of Structure 8 (Figure 157). Each of these was decorated with incised motifs on its upper surface, but it seems likely that they were only decorated when they became incorporated into Structure 7; of the 400+ roof slates recovered from Structure 8, only one (SF7710) was noted as decorated. In a world where buildings were seen to be animate, the dramatic collapse of Structure 8 would have surely been viewed as disastrous. It is conceivable that the roof slates, which would have carried some of the properties of their parent house with them, had to be ‘made anew’ through carving before incorporation into Structure 7.

Given the evidence from the ‘hidden’ decorated stones with the wall of this building (Chapter 7), this is also further indication that marking stones was the ‘done thing’ during construction; a fundamental and tacitly-understood part of the process of assembly and build.

Elsewhere at the Ness of Brodgar, in certain elevations in Structures 1, 8 and 10, groupings of small artefacts – worked flint, stone tools, animal bone – were found tucked into small gaps in the walling, often between decorated stones (Figure 158). These discrete placements find parallel with the discovery at Torbhlarren, Kilmartin of small flakes – residues of the action of creating rock art – tucked into crevices in the rock face (A. Jones et al. 2011). At the Ness of Brodgar, the inclusion of artefacts into the structure of buildings would have infused them with the properties and associations – historical, geographical, genealogical - that the objects brought with them, allowing people to reinforce their own connections through construction, facilitating social relations between people and buildings (cf. Herva 2009, 394).

**Animation and fragmentation**

On a broader scale, the idea that the landscape, and its constituent parts, was seen as animate in Neolithic Orkney has been explored by Colin Richards, in relation to the construction and materiality of the stone circles at Stenness and Brodgar. At the megalithic quarry of Vestafljot, the probable source for some of the stones at the Ring of Brodgar, Richards noted that the bedding plains run parallel to the exposed rock-face, giving the impression that monoliths are ‘rising out of the earth’ (Richards 2004a, 106).

The idea that stones, particularly megaliths, are animate in this way, is a common theme in the belief systems of many cultures across the world. As Nicole Boivin has discussed, this animacy can take several forms: stones can walk and dance, sacred and powerful, and be the embodiment of ancestral beings (Boivin 2004b, 5). At other times, however, they may have been seen as inert, or waiting to be materialised; the ability of stones to ‘shape-shift’ between forms is a common theme in the folklore of many societies (Saunders 2004; Muir and Richards 2013). Indeed, a crucial aspect of a relational ontology is that the qualities of things, and their identities, are context-dependent, and so can be very different in different times, settings and places (Herva 2010, 443). Stone may have been considered animate, but in relational thinking, animacy is not a given, or constant. For example, the quarrying of monoliths itself can be conceived as a process of animation and materialisation (Richards et al. 2013, 145). This is not to suggest that stones were considered as inert before being ‘brought to life’ through extraction, but that quarrying may have initiated one of many transformations which
occur with human engagement throughout the chaîne opératoire (Richards 2004a, 106).

This discussion is not just relevant to the stone circles at Stenness and Brodgar. Maeshowe is largely built from megalith-sized stones, both upright in its internal buttresses and laid horizontally and on their side in its walls and passage. At the Ness of Brodgar, Structure 10 incorporates several similarly sized elements in its primary phase. I have already argued that the procurement, transport and assembly of these stones would be a performative process. The movement of large stones would have likely been an unpredictable, risky and competitive undertaking (Richards et al. 2013, 122); it may have involved rites of passage, or allowed the cementing of social position within a particular group. Quarrying and extraction can thus be seen to play an active role in the creation and negotiation of identities at a primary stage in the construction process. The process of extracting and working stone - the performative fragmentation of the landscape - allowed a wide range of social relations to be established between people, place and materials. These relations would then carry through to the buildings, as construction enabled the re-assembly of those both fragments, and the systems of meaning they were bound up in.

The quarrying and extraction of monoliths for stone circles was not unique to these later monuments. It was part of a tradition of practice which stretched back into the 4th millennium and the building of stalled cairns (Richards 2004a, 109). Their construction likewise involved a performative assembly of materials which referenced the wider landscape. Moreover, at some stalled cairns, the striking similarities between the built masonry and geological features suggest that not only was the landscape being re-assembled, but entirely ‘rebuilt on its own terms’ (A. Jones 2005b, 242). For example, Andy Jones has suggested that the sequential layering of slabs in Early Neolithic buildings directly cites the horizontal strata seen in cliff sections, whilst corbelling ‘simulates the unusual formations of caves and sea arches’ (op. cit., 240). Whilst some of these homologies are clearly rooted in the particular affordances of the flagstone, at other sites the link between masonry and geology is more explicit.

At the Early Neolithic tomb of Blackhammer in Rousay, the stone slabs in the outer facing of the cairn are slanted to make a striking pattern of alternating hatched triangles in the stonework, in herringbone formation. The side
entrance was sealed at the end of the use of the tomb, and the stones used were set flush into the wall to match the pattern of slanting stones either side. Although this decorative stonework is most striking at Blackhammer, a similar design can be seen at Yarso (Callander and Grant 1935), Laird (Grant and Wilson 1943) and Midhowe (Callander and Grant 1934a). Similar but less well-defined stonework was exposed in outer walling at the tombs of the Head of Work, near Kirkwall, and at Unstan, near Stromness (A. Jones 2005b, 241). This distinctive patterning has been suggested as an imitation of laid turves (Tom Muir, pers. comm.), but Andy Jones has proposed a further possibility. He notes the striking similarity between the alternating hatched patterning on stonework of the Rousay tombs and the folded strata seen in the cliff-exposed bedrock in certain parts of Orkney, including the west coast of Rousay, close to the tombs exhibiting this style of masonry (ibid.). Jones suggests that this mimicry of the local geology naturalises the architecture, and allows the social identity of the builders and those interred in the tombs to be rooted in the surrounding landscape (ibid.).

This is an important observation, as it means that the materiality of tombs was reinforcing the links between landscape and architecture that are visible in their orientation and setting. More significantly, however, it indicates that in the 4th millennium, there was already an aesthetic understanding of the properties of stonework identified in the landscape itself and, in its incorporation in communal tombs, likely to have been implicated in the negotiation of social identity. This method of construction arose out of ‘an awareness of the properties and appearance of the constituent elements of the landscape’ (A. Jones 2005b, 240). This was rooted in the direct, everyday, practical engagement with stone as a material and with knowledge of its potentials and affordances; an awareness which arose through the practice of splitting and extracting the rock itself.

Islands, stone and identity

The discussion above allows a rather different approach to the emergence of stone architecture in Neolithic Orkney. This has traditionally been interpreted as a functional response to environmental conditions, a consequence of builders adapting to a largely tree-less landscape (Childe 1931c, 155; Ritchie 1985; Tipping 1994, 24). This can be understood within a wider school of thought which views islands as isolated locales, ‘where strange developments are inherently likely to take place’ (Robb 2001, 197, note 5). Unsurprisingly, therefore, interpretations of the Neolithic temples of Malta have also followed a rather similar trajectory to those applied to Orkney’s stone houses. Their unique form had traditionally been interpreted as a result of their
perceived isolation – their ‘islandness’ – combined with environmental degradation. Despite having its roots in much-criticised 1960s biogeographical models (Evans 1959; 1973), Neolithic Malta is still often interpreted in this way (Stoddart et al. 1993; Patton 1996).

John Robb, however, argues that rather than being environmentally determined, the building of the Maltese temples demonstrates a strategic and knowing act on the part of the islanders (Robb 2001). For him, practices of construction were inextricably linked to the creation of a distinctive local social identity as part of ‘the construction of cultural difference’ (op. cit., 192). Chris Tilley (2004) developed this argument to suggest that not only was the building of the temples linked to the construction of identity, but that this sense of being ‘involved mediating the landscape through architecture so that people could re-think themselves and their place in the world’ (Tilley 2004, 89). Through the selection, quarrying and working of particular raw materials, the building of the Maltese temples allowed people to build their identity through stone (ibid.). This offers an interesting analogy for thinking about the stone architecture discussed here.

In Neolithic Orkney, a sense of belonging and identity were expressed through the use of stone: both through its material and biographical associations with different locations and its relationship to geological features. But this attachment to place did not come about because woodland management had produced a treeless landscape (contra A. Jones 2012, 111). Recent palynological data from Orcadian sites has indicated that in the Neolithic, woodland was not as scarce as previously thought (Farrell 2009; Farrell et al. 2014). Indeed, at the Braes of Ha’Breck, Wyre, timber structures were being built and occupied whilst flagstone quarrying for the adjacent stone structures was taking place on the site (Lee and Thomas 2012). The use of stone for building in Neolithic Orkney was a cultural, rather than environmentally-determined, choice (Farrell et al. 2014). Architecture, landscape and identity were inextricably linked, but people did not build out of stone because they had to. They built out of stone because they could, and they were good at it; but more importantly because it was a fundamental part of who they were.

ART, ARCHITECTURE AND IDENTITY

I have suggested that identity in Neolithic Orkney was understood as part of a relational ontology, and interwoven with understandings of landscape and the wider world. These understandings would be linked to ancestral, genealogical and mythical connections. Through a process of ‘citation’ (cf. Butler 1993), lived experience involved both a passing down, and manipulation, of tradition; a referencing of both things that had gone before and of other places (Fowler 2001; A. Jones 2001a; 2005c; Kirk 2006, 335). This has implications for thinking about the ways in which art and architecture were enmeshed in social life at this time. The procurement of diverse materials for construction would have required journeys to familiar locales, allowing the telling of stories, as people reaffirmed their connections to particular places (Edmonds 1997, 102). The incorporation and re-assembly of these materials in the process of construction would allow a range of associations to be reworked in new contexts (Kirk 2006, 340). This in turn would allow people to situate themselves within particular geographical, and genealogical, frameworks, contributing to the construction and negotiation of personhood and identity (Fowler 2001). In the following sections, I will explore how the understanding of social identity in Neolithic Orkney relates to stone, and thus the wider temporal and geographical world. What is...
crucial here is that this understanding of landscape was both reflected in, and reinforced by, particular forms of stoneworking and decoration through practice.

**Art and landscape**

In the earlier Neolithic, several stalled cairns in Orkney appear to have explicitly referenced the local geological strata, as seen in the herringbone patterning on some of the Rousay tombs. This is evidence of a place-rooted aesthetic, linking people with stone and landscape, that was already established in the 4th millennium. This aesthetic was not limited to architecture. At the other end of the scale, the herringbone patterning seen in tomb masonry has also been likened to the decoration on the contemporary Unstan masonry (Callander and Grant 1937, 298; A. Jones 2005b, 241; Figure 159).

The idea that artefacts, architecture and landscape might be interlinked in this way, each making reference to the other at a range of scales, is not unique to the earlier Neolithic. A similar link between artefact decoration and the natural landscape is suggested by Alexandra Shepherd in her analysis of the incised designs found within Skara Brae (Shepherd 2000). Shepherd attempts ‘albeit with some trepidation, to read the designs’ on several of the stones, interpreting the motif on SB14_082 as a stylised landscape of sky / land / water (op. cit., 149). She expands this argument by suggesting that many of the geometric motifs seen on architectural stones at the site, in particular the cross-and-lozenge design (e.g. SB14_097; Figure 160), may have been inspired by the natural fracturing patterns seen in the bedrock around Orkney (Figure 161).

Shepherd sees the extension of this motif onto other materials such as bone and Grooved ware pottery as evidence of the fundamental nature of the ‘geometric landscape-based motif’ to the community’s visual language’ (Shepherd 2000, 151). I have already discussed potential problems with the idea that these designs might be directly representational, or that they can be ordered into an evolutionary scheme. However, in suggesting that the geometric motifs relate to the planes of fracture in the bedrock, as ‘the expression of a community whose origins were deeply rooted in the place’ (ibid.), Shepherd offers an intriguing and insightful line of thought. Although not a connection she fully developed, partly because it was interpreted as ‘re-used’, the context of SB14_097 within the foundation of a house wall offers significant support to this idea. If the cross-and-lozenge designs do relate to the patterning on bedrock, then it is perhaps not surprising that it was placed at the base of the walling: thus offering ‘a visual metaphor for the land itself, the bedrock on which a community sits’ (ibid.). With the foundation slab acting as ‘bedrock’ for the subsequent building, the materiality and architecture of the house can be seen as a microcosm of the wider landscape. This ‘re-assembly’ of bedrock within the foundations of a house would have brought not only the landscape into the building, but perhaps also its metaphorical qualities; timelessness, permanence and stability. The act of quarrying and working stone already references different times and places, but the stone’s subsequent carving and placement serves as a form of reinstatement, which takes that legacy and projects it into the future history of the building.

A parallel might be seen at Cuween hill cairn. Here, the hillside itself was partially quarried away for the construction of the cairn, leaving the orthogonal joint sets exposed on the quarried stone floor and allowing the bedrock to form a visible foundation for the tomb. It may be no coincidence that the internal walls include several incised stones bearing geometric motifs. At a range of scales, from art to architecture, the process of quarrying, building, and carving in Neolithic Orkney was continually making links between the natural and built environment, different places and communities, and even different times.

This raises several points for consideration. Rather than seeing incised geometric designs as a direct representation of the natural landscape (i.e. the reproduction of the image of the landscape as backdrop), the correspondence is both subtler, and more fundamental. In alluding to the fracturing patterns seen in natural stone in Orkney, designs are referencing the landscape and its properties through the material itself, making explicit both the commemorative associations of the place, and processes of extraction and working. The fracturing of the Orkney flagstone into lozenges and triangles is certainly one of its defining characteristics, but it is through interaction – the process and experience of sourcing and quarrying this stone - that this appreciation emerges. This link is strengthened by that fact that at the Ness of Brodgar and Skara Brae (Shee Twohig 1997, 385), it is the laminar flagstone, rather than the close-grained sandstone, which tends to be used for incised motifs. These are predominantly geometric in design and are comprised of intersecting vertical and diagonal lines, often forming cross-and-lozenge, zigzag and lattice patterns. Without needing to be mimetic, these geometric markings above all others would have ‘made sense’ in being relatable to the very stone, and processes of extracting and working stone, that was so fundamental to the identity of Neolithic Orcadians.

This makes the prevalence of linear, geometric motifs in Orkney become more understandable given that the islands’ geology is predominantly comprised of laminar flagstones. The peculiarities of the Orkney flagstone, its way of fracturing and the patterns that it produces, would be experienced every time stone was procured for building. In the relational ontology of Neolithic Orkney, worldviews would have been embedded in, and arisen from, people’s practical everyday engagement with the world (cf. Herva 2010, 443). In making this connection
Figure 160. Stone SB14_097 from Skara Brae, detail. Image © Antonia Thomas and reproduced by permission of National Museums Scotland.

Figure 161. Flagstone pavement just south of Skara Brae, Skail Bay. Image © Antonia Thomas.
between the bedrock and the decoration, it is possible to see a thread which runs through the whole chaîne opératoire of a block of building stone from quarrying through to stoneworking, construction, and appreciation. The materiality and construction of architecture was rooted in, and a mnemonic for, both the quarrying process and the broader landscape. Portable items with the same motifs might have linked this sense of identity at a personal scale (Figure 162). These links carried through to individual stones, as part of a continuum stretching from raw materials and the landscape to artefacts (cf. Bradley 2000a, 96), but they were carried through by the process of working the stone itself.

**Working stone and carving identity**

In Chapter 7, I discussed the work of anthropologist Trevor Marchand, who apprenticed himself to the masons of Djenné, Mali, in order to study the way in which social identity and knowledge were implicated in the construction process. Marchand observed how many of the apprentices were initiated as children, who followed fathers, uncles and older brothers to site. They were given the ‘small tasks’ of cleaning tools, fetching and passing materials and drinks for the masons (Marchand 2006, 53).

By a process of assisting, observing and mimicking, the trainee not only learnt about masonry techniques, but also became ‘immersed in the concerns, worldview and social performance of his mentor’, forging the young apprentice’s identity (ibid.). It would be through a similar ‘education of attention’ (Gibson 1986 [1979], 254) in the shared context of stoneworking, that people in Neolithic Orkney would learn about different social conventions and rules. As in other forms of community activities, novitiates, children and others would watch, follow and learn, ‘get in the way while work progressed, or practise on discarded stone’ (Edmonds 2004, 157). This may go towards explaining to considerable range in not only types of stoneworking, but also levels of skill, seen in Neolithic carvings. This diversity is, of course, missed by the homogenised designation of art and highlights the need to examine the specific context in which particular stones are found.

In Chapter 7, I discussed the different stages of the building process, and explored how stoneworking and decoration might play a role at different times in the life of the site. Rather than discrete ‘events’, I have argued that these stages were part of a series of ongoing encounters between materials, space and both human and non-human actors (Allen 2014, 170). Some of these may have been individual, even spontaneous, acts, whilst others would have required teams and considerable forethought and planning. The range of activities and materials involved in the construction process makes it likely that most members of the community would have been involved in some way. Some processes and skills

![Figure 162. Landscape art on a portable piece? SF7870 from the Ness of Brodgar. Image © Antonia Thomas.](image-url)
would have been learnt through keen observation of the older generation; others may have been learned through practice (O’Connor and Cooney 2010, xxiv).

Different stages in this chaîne opératoire would have necessitated different scales of labour, and social interaction; sometimes running in parallel, sometimes feeding into one another. For example, the incised motifs which were made, then immediately hidden, during the construction of Structure 7 at the Ness of Brodgar, were intimate acts of carving which nonetheless related to, and fed into wider stoneworking and decoration practices. Socially appropriate ways of acting – including how to work, dress and decorate stone – would have been unconsciously adapted through childhood mimesis, allowing the formation of group identities (Bourdieu 1977, 87-88; Boivin 2008, 67). In Neolithic Orkney, stone, and the working of stone, would have been habitual and ubiquitous, but this did not make it insignificant. Indeed, it is precisely its habitual nature which would have made stoneworking meaningful, as it is through the experience of making, carving and building, that objects, activities, people, and gestures become weighted with meaning (Turner 1967, 50; Connerton 1989, 88; Owoc 2007, 116). Largely unspoken, this shared body of technical knowledge would, through practice, reinforce people’s sense of individual and group identity.

This is not to say this stone decoration was a passive, isochrestic style however (sensu Sackett 1990). A crucial aspect of the relational ontology described in this chapter is that the qualities and identities of things, are context-dependent, and so can be very different in different times, settings and places (Herva 2010, 443). Social identity would have been active, continuously reaffirmed and renegotiated in relation to the rest of the world. At certain times, different connections would be drawn upon: in some contexts, it was appropriate to directly reference the processes of extraction and the wider landscape through working, whilst at others, the potentials and affordances of the material were actively ignored. Having discussed the significance of the landscape, however, it is worth pausing to consider the peculiarities of Orkney’s rock art. In contrast to almost all other areas where passage grave art is found, Orkney lacks any known examples of landscape-situated rock art. The landscape may be continually referenced through carving, but these references are all internalised within architectural contexts. ‘Natural rock art’ at the Ness of Brodgar

Through the materiality and construction of tomb architecture, and even in pottery patterns and carvings on stones, the distinction between natural and built in Neolithic Orkney was frequently blurred and even manipulated. At Skara Brae, fragments of tessellated pavement and horse-tooth stones which outcrop a few kilometres away were ‘discovered and carried home’ by the villagers (Childe 1931c, 185). There was clearly an interest in stone and in what we recognise as geological forms. This might allow the discovery of several stones at the Ness of Brodgar which exhibit certain natural markings to be understood more fully. In several instances, most notably in Structures 10 and 12, stones were found which were initially thought by excavators to be decorated, only for it to be subsequently realised that their markings were geological. And as we will see below, these were treated in a similar way to many of the carved designs on the site.

One example can be seen in the cell in the annexe to Structure 10. On the rear (north face) of a stone (Figure 163), which forms the easternmost (right-hand) jamb of the opening into the cell, the natural bedding plains of the flagstone itself have formed a saltire, or ‘X’, which is strikingly reminiscent of the deliberately-executed opposed-triangle motif seen on other stones across the site, including elsewhere in Structure 10 (Chapter 6). Something similar can be seen in Structure 12. Here, the walls at the northern end and the entrance into the forecourt were remodelled late on in the building’s life. This remodelling included the insertion of a large sandstone boulder, SF17482 at the northern corner of wall 6131 (Figure 164), to form the easternmost (right-hand) jamb to the entranceway. As an irregular boulder, which has been laid on end, the stone itself is atypical for the Ness of Brodgar. It appears to have been chosen specifically on account of its natural markings, which form an opposed-fan motif almost indistinguishable from the others found on the site, and which are particularly concentrated in this part of Structure 12.

Unremarkable when viewed from the north (Figure 165), SF17482 was inserted at a slightly awkward angle, and protrudes slightly into the opening. This allows its edge to be clearly visible on the approach to the entrance, with its markings on full view; like the pick-dressed ends of the piers in the main part of Structure 12, SF17482 was meant to be viewed from the south.

At specific times in the life of the site, therefore, the significance of naturally marked stones was drawn upon and incorporated into buildings. There was clearly an interest in geological forms and patterning, something which can also be seen at Skara Brae (above). The landscape was being incorporated, and reinstated, into buildings in several ways: sometimes through the selection of stones with particular natural markings, and sometimes through the carving of stones themselves. In Neolithic Orkney, therefore, distinctions between apparently different categories, such as natural or carved stones, might be meaningless. Although beyond the remit of this current book, this suggests that other materials, such as minerals and soils, might also be imbued with a significance that goes beyond their normative status (Boivin 2004b; Cooney 2010; Pollard and Gillings 2010).
Material transformations

For the most part, this book has been concerned with stone: its extraction, working and use in construction and decoration. But I have argued that in the relational thinking of Neolithic Orkney, things cannot be considered to have had an ‘essential’ quality but are rather continuously coming into being in relation with the world, which is itself in perpetual flux (Herva 2009, 388; 2010, 443; Ingold 2006, 9). In a world where materiality was fluid and mutable, ‘soil’ and ‘stone’ would not have been essential, bounded categories.

Stone could be ground down to make soil, and through admixture with materials such as animal fats, or elemental interactions with fire and water, soils, stones and other substances became transformed. At the Ness of Brodgar, fragments of (unworked), ‘toasted’ red sandstone also appear to have been ground down; this could be to make temper for pottery, or even a powder which could then be used for pigment (Martha Johnston pers. comm.). This stone would have been brought many kilometres to the site and pulverised, perhaps as part of a group ritual. The transformation of stone, through polishing and grinding, certainly appears to have been an important metaphor in the Neolithic (Cooney 2002; Cummings 2002; see Chapter 8). At the Ness of Brodgar, the tools of transformation - grinding mortars, quernstones and polissoirs - themselves become charged with meaning. In Structure 10, many of these were used in the production of pigment, which saw lumps of haematite and ochre ground down to make reds, oranges and yellows. The processing of galena allowed for a white pigment to be produced, whilst black would have been provided by charcoal (Mimi Bueno, pers. comm.). Like the stones described earlier, the procurement of these minerals would have required journeys to specific places, with particular geographical and historical associations. This allows us to think about the painted stones from the Ness of Brodgar as an interaction between two different substances, stone and pigment, which may both be considered animate, with separate identities (cf. Boivin 2004b). The process of grinding the pigment may have materialised the ore’s immanent animacy, or the application of pigment itself may have animated the relation between the painter and the stone (cf. Robinson 2004, 99). At Skara Brae, large numbers of ‘paint pots’ were found, many of which had lumps of pigment surviving in situ (Figure 166).

Although the contents have yet to be fully analysed¹, it seems likely that these lumps of pigment are comprised

¹ These are currently being studied by Professor Mimi Bueno of the University of Alcala
Figure 164. Entrance to forecourt, Structure 12, Ness of Brodgar, showing position of SF17482 (Looking N).
Image © Antonia Thomas.

Figure 165. Entrance to forecourt, Structure 12, Ness of Brodgar, showing position of SF17482 (looking S).
Image © Antonia Thomas.
of ground mineral ore mixed with animal fats as a binding agent (Mimi Bueno, pers. comm.). Different materials and substances were fragmented, re-assembled and transformed.

**SHIFTING CONTEXTS**

Earlier on in this chapter I suggested that there is evidence that the landscape of Neolithic Orkney, and its constituent materials, were considered as animate. This animacy would have been implicated when those materials were re-assembled in architectural projects. Within the relational ontology proposed here, material categories would have been shifting, mutable and crucially, context-dependent; ‘meaning’ would have been specific to particular times and places. This mutability precludes unitary assumptions for art and architecture and demands an approach which takes account of the subtleties of process, temporality and context. As we saw in Chapter 8, this also has implications for the way in which we record, illustrate and interpret archaeological remains in the present, and demands that animate these buildings and objects, not just in the Neolithic but also in our discussions of them now (cf. Alberti and Bray 2009, 341).

**Biographies and afterlives**

I have discussed how the prioritisation of form over process can be understood as part of the Cartesian dualism between culture and nature. This same dualism has structured the way in which archaeology has dealt with time. Both situations rely upon ‘an imagined separation between the perceiver and the world, such that the perceiver has to reconstruct the world, in the mind, prior to any meaningful engagement with it’ (Ingold 2000, 178). The biographical approach I have used here, however, allows a way of engaging with things beyond these dualisms (Herva 2009, 392). It emphasises that the meanings and perceptions of things are always contingent on context (Appadurai 1986), by recognising that ‘objects have a cultural history, that their meanings change through time and that the very historicity itself also imparts a meaning’ (Lucas 2005, 56). It allows us to follow artefacts and buildings, even after they have gone out of use and are fragmented, and to trace their continuing stories. It allows us to ask questions of artefacts ‘similar to those one asks about people’ (Kopytoff 1986, 66), by analysing the ways in which meanings and values are accumulated and transformed (Gosden and Marshall 1999, 172). This is in line with recommendations contained within the *Heart of Neolithic Orkney* Research Agenda, which recognises the importance of biographical studies to avoid the static objectification of artefacts and buildings (S. Jones et al. 2005, 80-81).

At the Ness of Brodgar, excavation has allowed an insight into how the biographies of particular structures and artefacts can be complex and mutable, and the way in which the properties of materials emerge through process. Of course, the ‘life history’ of a particular stone
does not end with the Neolithic. The significant role that carved stones play in both later prehistory and the historic periods is evidenced by their frequent discovery in brochs, medieval churches, and post-medieval barns and croft-houses. These items evidently influenced people long after they were first engaged with in the 4th or 3rd millennium BC. These longer-term biographies may not inform us about how stoneworking and decoration was considered in the Neolithic, but they are important in their own right as part of the ongoing stories of sites, structures and artefacts (ibid.). Moreover, looking at the ‘afterlives’ of artefact and buildings helps us to not only understand the potential complexity of the relationships between stones, places and people in the Neolithic, but also how our role in the present affects the way in which they are understood.

Perhaps the final stages in the chaîne opératoire, therefore, are the transformations which take place during discovery and excavation, and then when an artefact becomes part of a museum display, or a site is opened to the public. In Orkney, the exceptional survival of many Neolithic buildings, and the circumstances of their excavation and presentation means that many structures appear as static and fully formed (albeit with concrete roofs), courtesy of the Ministry of Works and the explosion in archaeological work that took place in the early 20th century. For example, the 1927-30 excavations at Skara Brae, like many others at the time, took place chiefly so that the site could be displayed to the public, leading to its current appearance:

“The site has been so laid out so visitors can conjure up a realistic picture of the ancient village. The old midden surface is represented by smooth turf, from which one can look down into the huts that once rose above it, peer through crannies into the underlying passages, and even descend through concrete hatches into the big sewers that drained the site at one time. Steep banks mark the gaps, to be filled up in imagination, where sections of the midden have been cut away to expose the interesting earlier stage in the settlement.” (V. Gordon Childe in the Glasgow Herald, June 27th, 1930, 7; my emphases)

Nearly 90 years later, despite the (as yet unpublished) 1970s excavations, the management approach for Skara Brae (and Maeshowe) remains reactive and focussed on conservation and tourism rather than research (Stephen Watt, Historic Environment Scotland, pers. comm.). Conserved, and ‘heritage-stabilised’ (cf. Pollard 2013, 190), the Skara Brae and Maeshowe we see today are inanimate, frozen in the time of their discovery and excavation. This (re)presentation then becomes self-perpetuating; if we see the past as static, we go on to produce a static past (A. Jones 2012, 7). And as we saw in Chapter 8, the representation of the past very often shapes our interpretation of it.

Traditions of illustration ‘endow the results of archaeological fieldwork with a spurious uniformity and authority’ (Bradley 1999b, 71). We then create a whole secondary set of material assemblages: whether the archive, the visitor attraction or the museum display (Lucas 2012, 230). And, as we saw in relation to the illustrations of the Brodgar Stone discussed in Chapter 8, these secondary assemblages often become the prima facie evidence on which interpretations are then based. What is needed is an approach which unpicks the complex biographies of stones and buildings in parallel, and to look beyond simplistic assumptions which have dogged many discussions of Neolithic art and architecture (Chapter 2) This type of analysis is rarely achievable, but is made possible by the excavations at the Ness of Brodgar. Excavation provides the most ‘dynamic point of contact with the context of prehistoric architecture’ (McFadyen 2013, 140), and affords an unparalleled insight into the chaîne opératoire of construction. It has allowed the identification of particular forms of stoneworking and decoration which were significant at different stages in this process, and how these may have been socially contingent and implicated in the negotiation of identity. The Ness of Brodgar was not, however, a site in isolation. It formed part of a nexus of important sites in the Stenness-Brodgar area in the 4th and 3rd millennia BC: what is now known as The Heart of Neolithic Orkney.

The Heart of Neolithic Orkney

Although this book has been about art and architecture in Neolithic Orkney as a whole, it has been focussed upon three sites: Maeshowe, Skara Brae and the Ness of Brodgar. These are all within The Heart of Neolithic Orkney World Heritage Site, as inscribed in 1999. Of course, this is a modern designation, but to what extent does it reflect the way in which the landscape was viewed in the Neolithic?

The monuments of the Stenness-Brodgar peninsulas sit within an extraordinary landscape: a large natural bowl comprising two lochs and surrounded by an amphitheatre of hills on the horizon, imagery which the monuments drew upon in their architectural representation (Richards 1996). We do not yet know, however, what the landscape was like before the great Neolithic monuments which characterise it now were built. It may have been naturally significant long before it was populated with the monuments seen today, and there may have been a well-worn routeway tracked across the peninsula.

The construction of the buildings at the Ness of Brodgar may have prevented people accessing a familiar, even ancestral path (cf. Bradley 2000a, 107-9), or it may have framed, or controlled access to those tracks. Maeshowe, the Ness of Brodgar, Barnhouse, the stone circles and
likely other sites\(^2\) would have been visible from one another, but like the stones within the buildings, that visibility may not have been consistent. Although these sites are broadly contemporary, there are probably nuances to their relative phasing that would have been highly significant. Given the dynamic nature of the buildings and complexes discussed here, it is likely that the relationship between these different sites was also in flux.

There are, for example, indications that the relationship between architecture, landscape and history altered throughout the Neolithic in Orkney. There is a shift from houses and tombs being built on new ground which had been stripped for construction, to those which are increasingly built on top of older buildings. With the exception of House 7, the buildings at Skara Brae appear to have been built over earlier remains. But against this background of instability was a need to reference the solidity of the landscape; the bedrock upon which the community was built (see above). At the Ness of Brodgar, the construction atop earlier buildings was so dramatic that most of the structures were inherently unstable and suffered significant subsidence. It seems that through this superimposition, the site’s physical location was far more important than structural soundness. Significantly, Maeshowe also appears to have been built on the levelled remains of an Early Neolithic house, a characteristic it shares with The Howe, Stromness, and which creates links not only with the wider monumental landscape but also a physical link with the past (Richards 1991, 26-27).

In the 4th millennium, many stalled cairns are built from stone which was quarried right next to the site, which was almost always on ‘new’ ground. By contrast, Later Neolithic passage graves and stone circles often contain stones drawn from much further afield, and reflect a concern to build, physically on the material traces of the past. This pattern indicates not only a changing conception of place, but also of time, over the Neolithic. The biographies of particular building sites increasingly seems to take precedence, whilst bringing in an ever wider geographical sphere of influence in its constituent parts.

At this late stage in the Neolithic, the built environment had taken on the history, associations and significance that geological features were previously imbued with; the relationship between landscape, identity and place had shifted. A common theme of the Stenness-Brodgar landscape is the gathering of people, places and things

\(^2\) Geophysical surveys in the World Heritage Site indicate several large, probably Neolithic, structures which are yet to be investigated (Nick Card, pers. comm.)
together, something that is represented in the materiality and architecture of the monuments (Downes et al. 2013, 94); in that sense, this really was the heart of Neolithic Orkney.

SUMMARY

I have suggested that it is useful to think of Neolithic Orkney through a relational ontology. This positions human activity—including stoneworking—within a network, or meshwork (Ingold 2006) of broader social interactions between people and things. In this thinking, stone is considered not as neutral or inert, but as an active and meaningful element of the animate world. Landscape and identity were inter-related; people understood themselves in relation to place and through their engagement with the different materials. And those understandings could be reworked. Through fragmentation and re-assembly, landscape and architecture intersect through the social performance of construction. In Chapter 7, I argued that the materiality of stone was significant, but that it was not static. It was through the subtle interplays between process, materiality and context that stoneworking became meaningful at different times. In Chapter 8, I explored how the different rhythms of engagement implicated in particular types of stoneworking might relate to their significance as embodied processes. These rhythms radiated out far beyond the temporal and spatial confines of a building to bring in the wider landscape and the significance of different times and places. I have suggested that the everyday, practical engagement with stone as a material, and the knowledge of its potentials and affordances which arose through the splitting and extraction of stone thus allowed the development of an aesthetic which was both deeply rooted in the landscape and implicated in the construction of social identity. Ways of working and decorating stone would have been adopted through an education of attention, a subtle watching and learning through generations.

It is through this bodily engagement that stoneworking and decoration would have been meaningful, without having to ‘mean’ anything per se; the associations of various stones with different sources and places would have meant that these engagements would have held deep connections and social memories (O’Connor and Cooney 2010, xxiv). By bringing a physicality to otherwise abstract and distant social categories, the construction of buildings would have also allowed the construction and ordering of social relationships (Richards 2004a, 107). It may be the architectural context of the decorated stonework at Maeshowe, Skara Brae and the Ness of Brodgar which is its crucial characteristic. But in Neolithic Orkney, the landscape continued to resonate long after it was fragmented, each building a re-assembly of diverse ‘pieces of places’ (cf. Bradley 2000a, 88). Social identity and a sense of belonging appears to have been intimately connected to landscape and the attachment of people to place (A. Jones 2005b). This place-rooted sense of self was elaborated through the materiality and construction of monuments such as stone circles, tombs and houses, but also through material culture such as building stones and artefacts. Biographies of people, place and stone ran in parallel, sometimes intersecting, sometimes diverging.

In this way, by linking landscape, with social identity through the embodied processes of working stone, art and architecture in 4th and 3rd millennium BC, Orkney managed to be connected to a wide Neolithic world, whilst all the time remaining distinctively local.
10. CONCLUSIONS

Figure 168. SF7530 during post-excavation recording. Image © Antonia Thomas
ART, ARCHITECTURE AND ARCHAEOLOGY

The Neolithic monuments discussed in this book are unique. Nowhere else in northwest Europe do contemporary tombs, ceremonial monuments and houses survive to such a degree of preservation. At the same time, the long history of study has left a rich resource for the researcher. But the same characteristics which allow Orkney’s Neolithic to be studied so comprehensively have actually set unhelpful limits on interpretation. The exceptional preservation of these Neolithic buildings, and the circumstances of their excavation and curation, have presented an image of stable monumentality, durable and unchanging over millennia. It has been all too easy to project this image back on to the past, and assume that in the Neolithic too, these buildings and their constituent stone, were solid, fixed and immutable.

Unsurprisingly, therefore, discussions of Orkney’s Neolithic art and architecture have tended to privilege their form, over the process by which they were created and appreciated. Buildings have been treated as static and monosemic, discussed as though they had appeared as fully formed, ‘ready-made’ spaces. This situation is partly an artefact of how we encounter these sites, as static and inanimate, frozen at the time of their discovery and excavation. A single, fixed time in the life of the structure then takes precedence over the longer and more complex biography of the site, overlooking the processes by which its architecture emerged through construction and dwelling.

A parallel study of the carvings found within buildings reveals a similar pattern. Neolithic art has frequently been discussed as though it were meant to be viewed, at leisure, as if hanging in a modern gallery (Boivin 2008, 99). On the printed page, prehistoric art and architecture are likewise reduced to static, two-dimensional forms, translated into decontextualised line drawings, phased plans, sections and stratigraphic matrices. These allow, and encourage, the comparison of artefacts and buildings across a wide geographical and temporal range. Superficial visual qualities are prioritised over other sensory engagements, leaving little scope for exploring the process by which they were made, or the relationship between raw material and ‘design’.

With only a few exceptions, almost all interpretations of Neolithic art are predicated on a series of interlinked assumptions: that visual form was of over-riding importance, that it had a singular and universal meaning which allowed it to be ‘read’, and that this meaning remained constant over time. This book has challenged these assumptions.

PROCESS, TEMPORALITY AND CONTEXT

Using primary data from the three sites of Maeshowe, Skara Brae and the Ness of Brodgar as springboards for my analysis, I have taken a process-led approach to explore the relationship between the carving of stone and the architecture which incorporates, and sometimes provides that stone, in Neolithic Orkney. This takes the discussion beyond the surface and allows us to engage with the question of when particular stones might have been carved, and how this relates to the practices of construction, inhabitation, even decommissioning and re-use of those buildings.

This has allowed an exploration of the temporality of appreciation of different carvings. I have argued that the prioritisation of form over process can be understood as part of the Cartesian dualism between culture and nature. This same dualism has structured the way in which archaeology has dealt with time. Time in archaeology is almost exclusively chronology: linear, spatial and static. I have argued that a more fruitful approach is to understand the temporality of past engagements as constituted through practice. In the sites discussed in this book, a variety of stoneworking practices are in evidence, and include incising, carving, pecking, pick-dressing, chiselling, grinding and cup-marking. These all have their own rhythms of engagement, but are not mutually exclusive; like the Brodgar Stone, several stones are incised, then carved or pecked. This diversity belies a catch-all designation of art, and the purely visual consumption that this term implies, and indicates that the process of working was a significant characteristic.

Indeed, I have argued that, for many of the phenomena which are grouped together as ‘art’, visual appreciation appears not to have been a consistent concern at all. At Skara Brae and the Ness of Brodgar, in each case where walls and structural elements have been dismantled, ‘hidden’ decorated stones have been found. Rather than accidental, or due to simple re-use, in many cases their placement was deliberate and considered. This can be seen in Structure 7 at the Ness of Brodgar, where it appears that the builders of the main house wall were actually incising stones whilst they were laying them. Once this wall was finished, the stones’ decoration was hidden; but at certain key points during construction they would have been entirely visible. I have argued that it is not enough to think about whether a stone is visible or hidden, we need also to explore the temporality of that visibility. This mutability precludes unitary assumptions for art and architecture and demands a closer examination of the context in which particular stones are found.

I have also suggested that a relational ontology is appropriate for Neolithic Orkney. Material categories would have been shifting, mutable and crucially, context-dependent; ‘meaning’ would have been specific to particular times and places. I have proposed, therefore, that unitary interpretations for carved stones which focus on their possible, singular ‘meaning’ might be misguided. But that is not to say that they were meaningless. On the contrary, I have argued that for people in Neolithic Orkney, working stone was a fundamental and highly
meaningful activity. Stone was ubiquitous and its working commonplace, but it would have been freighted with historical and geographical references though its material associations. Through practical, daily engagements with stone, people’s understanding of the world, and their place within it, would have been continually shaped and re-shaped. Stone would have provided both a medium and a metaphor for social relations. These relations were articulated and taken on board through practice.

This proposition can be tested by examining the particular patterns of deposition at the Ness of Brodgar. Here there is a relationship between certain processes of stoneworking and decoration and the contexts in which the stones are found. This can be seen in relation to the correlation between cup-marked stones and periods of transition and transformation, particularly in relation to Structure 10. I have suggested that the particular rhythm of engagement that takes place during the percussive working of stone makes it appropriate for these times of transformation. These observations take us a long way from the static image of art and architecture that have often dominated accounts of Neolithic Orkney.

**MAESHOWE, SKARA BRAE AND THE NESS OF BRODGAR**

One of the most enduring, and problematic, assumptions about prehistoric carvings is that they represent the ‘ritual expression’ of a ‘symbolic code’ (Nash 2012, 134). This idea endures in part because of the association between Neolithic art and funerary sites. In Orkney, however, there are also Neolithic carvings in domestic settings, and until recently, Skara Brae contained the largest assemblage of architecturally-situated carvings in Britain. But if ‘megalithic art’, is a phenomenon which is exclusively found within a burial context (e.g. Nash 2012, 138), this creates the paradox of otherwise identical, and contemporary, forms of stone treatment being classed differently. This dichotomy falls down in relation to the Ness of Brodgar. The quality of the stonework draws comparison with the architecture of the finest passage graves, whilst the presence of elements of ‘domestic’ architecture such as hearths and dressers explicitly reference contemporary dwellings.

The excavations at the Ness of Brodgar have allowed a never-before possible study of the way in which architectural stones were selected, worked, decorated and placed in the Neolithic. Over 700 decorated and dressed stones have now been found across the site and this forms the largest collection of architecturally situated rock art in the UK. Over 200 examples have been found in situ on the walls of the buildings, whilst many more come from stratigraphically secure Neolithic deposits. The size and quality this assemblage has allowed a reassessment of comparable material and sites and demolishes any doubts over the authenticity of similar carvings elsewhere in Orkney. Nevertheless, at the start of this research, I often wondered whether it would be possible to say anything ‘new’ about Maeshowe and Skara Brae. Both sites have been the focus of intensive study since the middle of the 19th century, and they have featured heavily in academic discussions and tourist literature alike. Yet, despite, or perhaps because, of this intensity of attention, at both sites there is much that has been overlooked. During the course of the fieldwork for this book, I have recorded 30 examples of incised decoration of likely Neolithic date within Maeshowe, 19 of which were not previously noted. Other features, such as pecked notches and recesses, and areas of chiselling, had likewise been largely overlooked. Of the 75 examples of in situ decoration at Skara Brae, 24 have been recorded for the first time by my survey. During each subsequent visit, however, additional carvings were noted, even in areas that I had surveyed in detail. It is likely that many more remain to be found.

At Maeshowe, and to a lesser extent at Skara Brae, the discussion has been largely restricted to the surface. But at the Ness of Brodgar, we are able to take things apart. The awareness that this allows has been critical to my study. Through the dismantling and deconstruction that excavation allows, we have been afforded a rare glimpse into the reverse processes of assembly and building. This has allowed an exploration of how the working and decoration of stone formed a fundamental part of the whole process of construction. Stones could be examined as walls were being dismantled, leading to the discovery of many stones with ‘hidden’ decoration. These insights cannot be gained by consulting an archive, or by examining artefacts after excavation in the finds shed or studio.

**FUTURE DIRECTIONS**

Like the art and architecture I have discussed, this book does not constitute a finished product. It merely represents a snapshot of Neolithic Orkney, as it is known in 2015, during the writing up of my research. The excavations at the Ness of Brodgar are ongoing, and details relating to the finer points of phasing and chronology will likely be subject to reconsideration as the excavations progress, and the modelling of radiocarbon dates continues. The cut-off date for my data collection was 2013, and between then and the completion of this book, there have been two further seasons of excavation, and over 150 further decorated or dressed stones have been discovered. Excavation is expected to continue for some years, and will likely involve the dismantling of more structures. It is essential that this process continues to include careful recording of how the stones were placed.

At the Ness of Brodgar, the fragility of the exposed stonework means that surfaces often laminate away after one or two seasons of fieldwork; coupled with
the ephemeral nature of many of the marks, this means that if the decoration was not actively recorded during excavation, it might not be noted at all. Moreover, the position of many of the decorated stones (at the base of large walls, for example) means that they are unlikely to ever be removed from site, and will be preserved by record alone. At Maeshowe and Skara Brae too, the stonework is becoming increasingly vulnerable both to the elements and to visitor pressure. Again, very few of the carved stones can be removed from these sites; we need to record them in situ. The role that new technologies can play is this record will be crucial. The affordances of Reflectance Transformation Imaging (RTI) and close-range laser-scanning, for example, are likely to dramatically increase the amount of information we can gain from both artefacts and built structures. 

I have suggested that, in Neolithic Orkney, there was a relationship between raw material and the process of working, with incising and carving more suited to laminar flagstone, and percussive techniques predominantly found on the more coarse-grained sandstone. I have also argued that the processes of procurement and quarrying, and the journeys to sites of stone extraction would have been significant, and may have contributed to the biographies of the buildings. Yet little is actually known about the source of much of the stone used at the three sites discussed here. Detailed lithological work, such as that currently being undertaken by Martha Johnson at UHI, holds a huge potential for understanding the finer details of how the wider landscape was negotiated, fragmented and then re-assembled through construction.

Although this book has focussed upon Orkney, the research reported here has a much wider relevance. I suggested that much of Orkney’s Neolithic stoneworking and decoration has been overlooked because it does not compare favourably with the large, visually-arresting, spiral-pecked stones which dominate the Irish sites. But in Ireland too, we have perhaps tended to see only what we expect to see. Re-evaluation of the stonework at Knowth is highlighting many examples of incised markings that were initially overlooked (Elizabeth Shee Twohig, pers. comm.), and which would benefit from comparison with the Orkney material. I have suggested that landscape, construction and social identity were inextricably linked through the working of stone in Neolithic Orkney. Elsewhere too, we might expect distinctive local patterns. The diversity and quality of the evidence from the Ness of Brodgar permits a re-assessment of other markings, for example, the incised designs recorded in the White Cairn of Bargrennan (Piggott and Powell 1949, 148). There remains much work to be done.

SUMMING UP

I introduced this book with the story of the discovery of the Brodgar Stone, a remarkable decorated slab which we now know came from the Ness of Brodgar. I argued that an examination of the way that this stone has been discussed, and illustrated, reveals several key issues, in particular, sequences of attention – incising, carving, pecking - to the stone’s working which have been entirely overlooked. From these it appears that the Brodgar Stone had a complex biography in the Neolithic, comprising several stages of marking and alteration. Yet only one of these stages – the incising – has ever received any attention, highlighting archaeology’s continuing preoccupation with origins, over the longer histories, the befores and the afters, in the lives of art, artefacts and buildings. These are important. If we only focus on one particular point in time, we miss out on the rich narrative of the rest of the story. It is this bigger picture that I have tried to explore in this book. By taking a broadly biographical approach, I have explored the befores and the afters in the wider assemblages of Neolithic art from Maeshowe, Skara Brae and the Ness of Brodgar. These biographies are not, however, confined to the Neolithic. The sites presented in this book are important now, and continue to enthrall tourists and archaeologists alike. Many of the carved stones I have discussed have become iconic, and their designs feature on a bewildering range of merchandise. At the same time, the legacies of 19th-century antiquarianism and Childean narratives, and the processes of recording and excavation now, all contribute to the ongoing biographies of the carved stones discussed here. Their stories are still being told.
11. EPILOGUE

Figure 169. Finds bag containing fragments of SF7530. Image © Antonia Thomas
Peter had raised an Orkney flag on the pole in his garden, to help me find the house. The building itself was unexpectedly modern, but the land had been occupied by Peter’s family for generations. He opened the door and showed me the way to the sitting room. On a round table in front of the sofa, he had laid out an A4 folder containing various photographs, hand-written notes and newspaper cuttings. Later on that afternoon, two cigar boxes would appear, each containing their own assemblages: steatite spindle whorls, stone tools, flint arrowheads and polished stone axes. Items from the Norse period, the Iron Age, or the Neolithic, but which told stories from the 1920s, the 1940s – the times when they were found, curated and treasured.

I had written to Peter Leith a week earlier about the Brodgar Stone. It had been his father’s photograph which had illustrated Marwick’s Proceedings of the Society of Antiquaries of Scotland article in 1926, and I was keen to know more about it. Peter told me about Mr Wishart and his father, and how he chalked in the lines on the stone to make them stand out. Holding the photograph and talking to Peter, I found out more about the image and how it had come to be taken, and in a way discover more about the stone itself and its biography. There were different narratives at work combining to tell this stone’s story; it became clear that as an artefact, the photograph operates on several levels. It tells the story of 1920s curiosity as much as that of Neolithic stone-carvers, whilst in its representation, display and reproduction, it has influenced contemporary academic discussions.

But for Peter, this was also a very personal possession: a family photograph, with a family story. I have long been fascinated with both this stone and its reproduction, the image and the artefact, and I felt honoured when Peter gave me the print. An object linking the past and the present, its story is woven through with both archaeological and personal narratives. Much more than just an image, the photograph had become an artefact itself.
Figure 170. Photograph of the Brodgar Stone taken by Peter Leith in 1925 (Reverse side).
(Reproduced with the kind permission of Peter Leith).


BOWKER, K., 2014. Now you see it, now you don’t: an incised stone of probable Neolithic date near Arisaig, on the west coast of Scotland. PAST, 77 (July 2014), pp. 13.


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The Neolithic sites of Orkney include an impressive number of stone-built tombs, ceremonial monuments and – uniquely for northern Europe – contemporary dwellings. Many of these buildings survive in a remarkable state of preservation, allowing an understanding of the relationship between architectural space and the process of construction that is rarely achievable. Until recently, however, relatively little has been known about the decoration of these sites.

This book addresses that gap to offer a groundbreaking analysis of Neolithic art and architecture in Orkney. Focussing upon the incredible collection of hundreds of decorated stones being revealed by the current excavations at the Ness of Brodgar, it details the results of the author’s original fieldwork both there and at the contemporary sites of Maeshowe and Skara Brae, all within the Heart of Neolithic Orkney World Heritage Site.

It provides the first major discussion of Orkney’s Neolithic carvings, and uses these as a springboard to challenge many of the traditional assumptions relating to Neolithic art and architecture. By foregrounding the architectural context of mark-making, this book explores how both buildings and carvings emerge though the embodied social practice of working stone, and how this relates to the wider context of life in Neolithic Orkney.