ART AND ARCHITECTURE IN NEOLITHIC ORKNEY

PROCESS, TEMPORALITY AND CONTEXT

Antonia Thomas

ARCHAEOPRESS ARCHAEOLOGY

Archaeopress Publishing Ltd

Gordon House 276 Banbury Road Oxford OX2 7ED

www.archaeopress.com

ISBN 978 1 78491 433 2 ISBN 978 1 78491 434 9 (e-Pdf)

© Archaeopress and A Thomas 2016

Cover: Carved orthostat, House 7, Skara Brae, Orkney. Image © Antonia Thomas.

University of the Highlands and Islands Archaeology Institute Research Series: 1

The University of the Highlands and Islands Archaeology Institute is located in one of the most exciting archaeology areas in the world — Orkney in Northern Scotland. Surrounded by thousands of archaeology sites ranging from the Neolithic to World War 2, The Archaeology Institute is well placed as a world-class teaching and research organisation to advance our understanding of the historic environment. For more information on teaching, research and lifelong learning at the University of the Highlands and Islands Archaeology Institute go to our website: https://www.uhi.ac.uk/en/archaeology-institute



All rights reserved. No part of this book may be reproduced, in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of the copyright owners.

Printed in England by Oxuniprint, Oxford
This book is available direct from Archaeopress or from our website www.archaeopress.com

CONTENTS

LIST OF FIGURES	vii
FOREWORD	xiii
PROLOGUE	VV
LATE FEBRUARY 1925, BRODGAR FARM, STENNESS	
1. INTRODUCTION	1
IMAGES AND ARTEFACTS	3
BACKGROUND TO THE RESEARCH	4
METHODOLOGY	5
Survey of in situ stonework	5
Written records	5
Photography	5
Drawn record	5
Databasing	6
Museum-based research	6
Archival research	6
THE STRUCTURE OF THIS BOOK	6
2. ART, ARCHITECTURE AND ARCHAEOLOGY	0
INTRODUCTION	
· · · · · · · · · · · · · · · · · · ·	
Art history and archaeology	
Anthropology and art NEOLITHIC ART AND ARCHITECTURE IN BRITAIN AND IRELAND	
Setting and chronology Passage grave art in Ireland	
The Boyne Valley sites	
Fourknocks	
Loughcrew	
Passage grave art in Britain	
Bryn Celli Ddu	
Barclodiad y Gawres	
The Calderstones	
Fylingdales	
Carvings in other contexts	
Motifs and style	
Incising and carving	
Pecking, grinding and drilling	
Pick-dressing and chiselling	
Polishing	
Colour and paint	
'Portable' art	
DISCUSSION	
'Reading' images	
Visibility and audience	
Architecture and context	
SUMMARY	
3. ORKNEY	
INTRODUCTION: ORKNEY	
BACKGROUND TO RESEARCH	
The 'Golden Age' of antiquarian investigations	
A second 'Golden Age': the early 20th century	30

Rentrew and the 'New Archaeology'	
Dwelling amongst the monuments: Colin Richards and Barnhouse	
Recent work on Neolithic Orkney	
DEFINING NEOLITHIC ORKNEY	
Chronologies	
Typologies	
ART AND ARCHITECTURE IN NEOLITHIC ORKNEY	
Passage grave art in Orkney	
The Holm of Papa Westray South	
Eday Manse	
Pickaquoy	
Pierowall and Howe	
Incised stonework in tombs	39
Decorated stone in domestic contexts	41
The Ness of Brodgar	44
Motifs and execution	44
Neolithic decorated stones re-used in later contexts	46
Portable art and artefacts	46
Grooved ware	47
DISCUSSION	48
Orkney and Ireland	48
Ritual / domestic	48
Typologies and chronology	49
Process, temporality and context	49
SUMMARY: ORKNEY	49
4. MAESHOWE	54
INTRODUCTION	
ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	
Antiquarian investigations	
Gordon Childe	
Colin Renfrew	
Colin Richards	
Non-intrusive surveys and monitoring, 1980s-present	
The internal masonry	
Stone dressing	
Norse inscriptions	
Neolithic carvings	
Dating and chronology	
SURVEY WORK 2012-2014	
Recording methodology	
Survey results	
The passage	
The southwest elevation (Figures 42, 43)	
Northwest elevation (Figures 44, 45)	
Northwest cell (Figure 46)	
Northeast elevation (Figures 47, 48)	
Northeast cell (Figure 49)	
Southeast elevation (Figures 50, 51)	
DISCUSSION: ART AND ARCHITECTURE AT MAESHOWE	
Incised stonework	
Polishing	
Pick-dressing	
Chiselling	
Pecked recesses and notches	
SUMMARY	84

5. SKARA BRAE	85
INTRODUCTION	
ARCHAEOLOGICAL BACKGROUND	
Early investigations	
Guardianship, excavation and consolidation works, 1924-1930	
Excavations, 1972-73	
Surveys, monitoring and rescue excavations, c. 1950-2014	
THE SITE AND STRUCTURES	
Phasing and chronology	
· · · · · · · · · · · · · · · · · · ·	
The houses	
The earlier houses	
The later houses	
House 7	
House 8	
The passages	
The end of occupation and later activity	
Decorated artefacts and portable art	
Decorated stonework	
DECORATED STONE RECORDING 2011-2014	
Fieldwork methodology	
Survey results	
House 7	101
Entrance	
North elevation (Figures 75, 76)	101
East elevation (Figures 77, 78)	103
South elevation (Figures 79, 80)	103
'Limpet box' in southwest corner (Figures 80-82)	105
West elevation (Figures 83, 84)	107
Stones removed from House 7	107
House 1 (Figure 85)	108
House 8 (Figure 86)	109
'Drain D'	109
Passage A (Figure 88)	109
Passage B (Figure 89)	
Passage C (Figure 90)	
Other houses and areas on site	
Other stones removed from the site	
DISCUSSION	
Chronology and authenticity	
Decorated stonework: motifs and execution	
Decorated stonework: context and distribution	
Visibility and audience	
SUMMARY	
SOMMAN	120
6. THE NESS OF BRODGAR	
INTRODUCTION	
ARCHAEOLOGICAL BACKGROUND	124
Trench P excavations, 2007-2013	124
Trench J and the northwest enclosure wall	125
The southeast enclosure wall	125
Trench T	125
Post-Excavation Analysis	125
THE TRENCH P STRUCTURES	
Raw materials	
Masonry	
Structure 1	
Later modifications	

Decorated and dressed stonework in Structure 1	
The intramural passage	
Structure 19	130
Structure 7	132
Industrial activity to the S of House 7	132
Structure 11	133
Structure 8	133
Spatial organisation	133
The Brodgar Stone	134
The end of the building	
Decorated and dressed stone in Structure 8	
Structure 12	
Construction	
Spatial organisation and layout	
Subsidence, instability and secondary modifications	
The end of the main building	
Robbing	
Forecourt	
Decorated and dressed stonework in Structure 12	
Structure 10	
Construction	
Scale	
Spatial organisation	
Secondary modifications	
The NW corner	
The end of the building: demolition and decommissioning	
Abandonment and robbing	
Decorated and dressed stone in Structure 10	
Structure 14	
Layout and spatial organisation	
Structure 14 use and modification	
Decommissioning and demolition	
External features	
Decorated and dressed stone in Structure 14	
Other Trench P structures	
PHASING AND CHRONOLOGY	
DECORATED STONE RECORDING 2010-2014	
Fieldwork methodology	
Survey results	
Unstratified stones	
The Trench P assemblage	
Other areas of the site	
DISCUSSION	
Incised and carved stonework	
Surface preparation of stones	
Motifs and execution	
Pecked stonework	
Cupmarks	
Dressed stonework	
Bas relief dressing	
Chiselling	
Multiple working	
SUMMARY	153
7. PROCESS	157
INTRODUCTION	
A RETURN TO THE MATERIAL	
Rock, stone and stoniness	
,	

	Materials and materiality	160
	MATERIALITY IN FLUX	161
	Texture and colour	161
	Light	162
	Visibility and audience	
	'Hidden' art	
	ARCHITECTURE AS PROCESS	
	Design and planning	
	Procurement	
	Preparing the site	
	Setting out and foundation	
	Building	
	Building Structure 7	
	Occupation and modification	
	Closure	
	The life and death of Structure 10	
	Robbing and beyond	
	SUMMARY	
8.	. TEMPORALITY	179
	TEMPORALITY	181
	ARCHAEOLOGY AND TIME	181
	Culture, classification and change	181
	Archaeology and chronology	182
	Philosophy and time	184
	Dwelling and process	184
	ART, ARCHITECTURE AND TEMPORALITY	
	Fuzzy stratigraphy at the Ness of Brodgar	
	Structure 1, southern entrance	
	The intramural passage	
	Wall 3079, Structure 8	
	Art and evolution at Skara Brae	
	Back to the Brodgar Stone	
	RHYTHMS OF ENGAGEMENT	
	Process and context	
	Cup-marking and cup-marked stones at the Ness of Brodgar	
	'Functional' stones at the Ness of Brodgar	
	Process and transformation	
	Body and memory	
	SUMMARY	
	SUMMART	200
9.	CONTEXT	203
	INTRODUCTION	
	ARCHITECTURE AND LANDSCAPE	205
	The chaîne opératoire	205
	Materials and meshworks	208
	Architecture and animation	208
	Animation and fragmentation	209
	Architecture and landscape in Neolithic Orkney	210
	Islands, stone and identity	211
	ART, ARCHITECTURE AND IDENTITY	
	Art and landscape	
	Working stone and carving identity	
	'Natural rock art' at the Ness of Brodgar	
	Material transformations	
	SHIFTING CONTEXTS	
	Biographies and afterlives	
	The Heart of Neolithic Orkney	
	SUMMARY	220

10. CONCLUSIONS	
ART, ARCHITECTURE AND ARCHAEOLOGY	
PROCESS, TEMPORALITY AND CONTEXT	
MAESHOWE, SKARA BRAE AND THE NESS OF BRODGAR	
FUTURE DIRECTIONS	
SUMMING UP	227
11. EPILOGUE	229
THURSDAY 14 TH NOVEMBER 2013, LANGBIGGING, STENNESS	231
REFERENCES	235
INDEX	252
INDEX	

LIST OF FIGURES

Figure 1. Photograph of the Brodgar Stone taken by Peter Leith in 1925 (Reproduced with the kind permission of Peter Leith)	1
Figure 2. The Brodgar Stone photographed by Tom Kent in 1926 (reproduced with the kind permission of Orkney Library and Archives)	3
Figure 3. Example of a Decorated Stone Recording Sheet used at the Ness of Brodgar (reproduced with the kind permission of ORCA).	6
Figure 4. SF7530 on display at the Pier Arts Centre, Stromness, January 2011. Image © Antonia Thomas	9
Figure 5. Altamira cave, Spain (detail). Image © Thomas Quine and licensed under Creative Commons	2
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 1	.4
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	.4
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.	.6
Figure 9. Examples of 'megalithic art' from Britain and Ireland. (a): Fourknocks; (b) Fylingdales; (c) Loughcrew; (d) Barclodiad y Gawres. (Image © Antonia Thomas: a, b, d after Shee Twohig 1981; b after Vyner 2011)	.8
Figure 10. The principal motifs in British and Irish passage grave art. Image © Antonia Thomas, after Robin 2008, 300, fig. 3.34 2	0
Figure 11. Incised slate disc from Woodcock Corner, Truro, Cornwall. Image © Antonia Thomas and reproduced with the kind permission of Cornwall Archaeological Unit	3
Figure 12. Victorian Graffiti at the Ring of Brodgar. Image © Antonia Thomas	7
Figure 13. Childe at Skara Brae. Photograph by Tom Kent; reproduced with the kind permission of Orkney Library and Archives 3	0
Figure 14. Simplified plan of the main buildings, Barnhouse. Image © Antonia Thomas, after Jones and Richards 2005, 29, Fig. 3.8 3	2
Figure 15. Orkney, showing the location of the main sites discussed in the text. Image © Antonia Thomas	3
Figure 16. Schematic representation of Early and Later Neolithic architecture and material culture. Image © Antonia Thomas 3	5
Figure 17. Knap of Howar, Papa Westray, showing the 'typical' Early Neolithic linear architectural layout. Image © Antonia Thomas	6
Figure 18. House 7, Links of Noltland, Westray, showing a 'typical' Later Neolithic concentric spatial layout. Image © Antonia Thomas	6
Figure 19. Approximate timeline of the main sites discussed in this thesis. Image © Antonia Thomas	7
Figure 20. Examples of 'classic' megalithic art from Orkney. Image © Antonia Thomas, after Shee Twohig 1981 and Sharples 1984 3	9
Figure 21. Examples of incised motifs in Orkney tombs. Image © Antonia Thomas, after Bradley et al. 2000 4	0
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	.2
Figure 23. Pecked stone from an Early Neolithic dwelling at Green, Eday. Face is approximately 580mm wide. Image © Antonia Thomas	2
Figure 24. Pecked stone from Early Neolithic house at Smerquoy, St Ola. Face is approximately 330mm wide. Image © Antonia Thomas	3
Figure 25. Refitting pieces of a decorated cist slab found at the Ness of Brodgar during excavation in 2006-7. Image © Antonia Thomas	.3
Figure 26. Stylised examples of typical Neolithic art motifs found in Orkney. Image © Antonia Thomas	.5
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	5
Figure 28. Examples of decorated Grooved ware pottery from the Ness of Brodgar. Image © Antonia Thomas 4	.7
Figure 29. Decorated stone artefact from Skara Brae. Image © Antonia Thomas and reproduced with permission of National Museums Scotland4	.7
Flgure 30. Mason's mark and date of 1865, Maeshowe. Image © Antonia Thomas	1
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	:2

Figure 32. The mound of Maeshowe, from the southeast. Image © Daniel Lee	54
Figure 33. "After a few days' labour the whole of the rubbish filling the chamber was removed, but long ere this wa 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.	e h
Figure 34. Detail of Maeshowe's internal masonry. Eastern buttress looking east (left), and northeast (right). Image © Antonia Thomas	
Figure 35. The large block forming the right-hand side of the SE cell showing two stages of pick-dressing overlain by chiselling Image © Antonia Thomas.	
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	У
Figure 37. Detail of runic inscriptions No.4 and No.5 (following Barnes 1994) on the west buttress. Image © Antonia Thomas	s 60
Figure 38. The Maeshowe 'dragon'. Image © Antonia Thomas.	60
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.	<u>,</u>
Figure 40. Runic inscriptions overlying pick-dressing on the NW elevation. Other markings in the tomb are less easily dateable Image © Antonia Thomas.	
Figure 41. Plan of Maeshowe showing the carvings recorded during my survey. This includes all of the areas noted by Ashmore (1986) and Bradley at 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.	n
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	
Figure 43. Southwest internal elevation. Detail of incised markings. Image © Antonia Thomas	65
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	
Figure 45. Northwest internal elevation. Detail of incised markings. Image © Antonia Thomas	67
Figure 46. Detail of incised motifs in the northwest cell. Image © Antonia Thomas.	69
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	
Figure 48. Northeast internal elevation. Detail of incised markings. Image © Antonia Thomas.	71
Figure 49. Detail of incised stones in the northeast cell. Image © Antonia Thomas	72
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	
Figure 51. Northeast internal elevation. Detail of incised markings. Image © Antonia Thomas.	75
Figure 52. Probable Neolithic carving MH14_28. For position on the southeast elevation see Figure 50. Image © Antonia Thomas	
Figure 53. Approximate heights of incised motifs within the main chamber at Maeshowe. Image © Antonia Thomas	76
Figure 54. Incised motifs recorded within Maeshowe (selected). Image © Antonia Thomas	77
Figure 55. Distribution of banded, geometric motifs in Maeshowe. Image © Antonia Thomas	79
Figure 56. The inner lintel of the entrance passage, showing pick-dressing. Image © Antonia Thomas.	80
Figure 57. Discrete sub-circular area of pick-dressing on the southeastern side of the passage. Image © Antonia Thomas	80
Figure 58. Detail of chiselling at the base of the south face of the north buttress. Image © Antonia Thomas	82
Figure 59. Table detailing the pecked recesses in Maeshowe. Image © Antonia Thomas	82
Figure 60. Recess C on the northwest internal elevation. For wider context see Figures 44 and 61. Image © Antonia Thomas.	83
Figure 61. Northwest internal elevation showing pecked recesses and areas of loose stonework. Image © Antonia Thomas	83
Figure 62. Notches in the orthostats forming the southwest side of the passage. Image © Antonia Thomas	84
Figure 63. William Watt's 'Intervention': The sea-view window in House 1, Skara Brae. Image © Antonia Thomas	85
Figure 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.	

Figure 65. "Among those numerous remains of primitive dwellings of the early inhabitants of the Orkneys, which have bee more or less examined, a great mass of ruins on the shore of the bay of Skailloccupies a prominent place and deserve particular notice" (Petrie 1867, 201). Etching of original painting of House 1 by John Cairns, reproduced in Petrie 1867. Plate XXXIX. Reproduced with kind permission of the Society of Antiquaries of Scotland	es 7,
Figure 66. House 1 in 1924, looking W (Image © Historic Environment Scotland, image reference SC1165717)	90
Figure 67. "When eventually we reached the floor layers we were working in a slimy mass having very much the consistence of a blanc mange [sic]" (Childe 1929, 250). House 7 during excavation in 1928, looking SSE. Image © Historic Environment Scotland (Vere Gordon Childe collection reference SC 1409736 and reproduced with kind permission)	nt
Figure 68. Decorated slab SB14_097 on display. Image © Antonia Thomas and reproduced by permission of National Museum Scotland.	
Figure 69. Phased site plan showing the 1970s trench locations. Image © Antonia Thomas, after Shepherd 2000, Fig.1	94
Figure 70. Decorated stone knives from Skara Brae. (a): SB14_089; (b): SB14_090. Image © Antonia Thomas, reproduced be permission of National Museums Scotland.	
Figure 71. SB14_092, found by Childe 'in the midden'. Image © Antonia Thomas, reproduced by permission of National Museums Scotland.	
Figure 72. Phased site plan showing the distribution of decorated stones. Image © Antonia Thomas, after Shepherd 2000, Fig. 1	99
Figure 73. House 7. Distribution of decorated stones. Image © Antonia Thomas.	100
Figure 74. SB14_002. Photograph by Tom Kent; reproduced with the kind permission of Orkney Library and Archives	101
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	
Figure 76. Decorated stones, northern internal elevation (detail). For position see Figure 75. Image © Antonia Thomas	103
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	
Figure 78. Decorated stones, eastern internal elevation (detail). For position see Figure 77. Image © Antonia Thomas	105
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	
Figure 80. Decorated stones, southern internal elevation (detail). For position see Figure 79. Image © Antonia Thomas	
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	108
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	
Figure 84. Decorated stones, western internal elevation (detail). For position see Figure 83. Image © Antonia Thomas	111
Figure 85. Detail of western elevation, House 1, showing position of SB14_025 and SB14_026. Image © Antonia Thomas	112
Figure 86. Distribution of decorated stones in House 8. Image © Antonia Thomas, after Shee Twohig 1981, Fig. 287	
Figure 87. SB14_049, under glass in Passage A. Image © Antonia Thomas.	114
Figure 88. Distribution of decorated stones in Passage A. Image © Antonia Thomas, after Shee Twohig 1981, Fig. 288	115
Figure 89. Distribution of decorated stones in Passage B. Image © Antonia Thomas, after Shee Twohig 1981, Fig. 288	116
Figure 90. Distribution of decorated stones in Passage C. Image © Antonia Thomas, after Shee Twohig 1981, Fig. 288	117
Figure 91. Distribution of chevron-decorated stones in House 7. Image © Antonia Thomas	
Figure 92. Approximate heights above floor of decorated stones in House 7, compared with Maeshowe. Image © Antoni Thomas	
Figure 93. Detail of SB14_020. Image © Antonia Thomas and reproduced by permission of National Museums Scotland	120
Figure 94. SF16258 during removal from Trench P, The Ness of Brodgar. Image © Antonia Thomas	121
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	
Figure 96. Ness of Brodgar, Structure 1 revealed during GUARD's excavations in 2003. Image © ORCA	124
Figure 97. The Brodgar peninsula, showing trenches (red) and geophysical anomalies (blue). The excavated structures i Trench P (Figure 98) are shown in black. Image © Antonia Thomas, based on survey data kindly provided by ORCA	126
Figure 98. Ness of Brodgar, Trench P. Image © Antonia Thomas.	127
Figure 99. Sample elevations of the main Trench P structures. Image © Antonia Thomas.	128

Figure 100. Structure 1 in 2014. Image © Hugo Anderson-Whymark	130
Figure 101. Orthostat 1024 inserted into the primary hearth of Structure 1. Image © ORCA	131
Figure 102. Structure 1's south entrance. Image © ORCA.	131
Figure 103. Structure 7 under excavation in 2011. Image © ORCA	132
Figure 104. Structure 8 under excavation in 2010, showing the 'roof slate horizon'. Looking sw. Image © ORCA.	
Figure 105. Structure 12 under excavation in 2014. Image © Hugo Anderson-Whymark.	135
Figure 106. North entrance, Structure 12, showing the position of decorated slabs SF6189, SF16190 and SF18251. Looking E. Image © Antonia Thomas	
Figure 107. Structure 10 during excavation in 2010. Looking W. Image © ORCA.	138
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 <i>in situ</i> during excavation of the SW corner buttress in 2013. Looking S. Image © Antonia Thomas.	
Figure 110. Cup-marked stones SF6136 and SF6137 adjacent to standing stone 1332. Looking NE. Image © ORCA	141
Figure 111. Cup-marked stone SF7530, incorporated within secondary walling by the entrance. Looking NE. Image © ORCA.	141
Figure 112. Structure 14 under excavation in 2014. North is to the top of the picture. Image © Hugo Anderson-Whymark	143
Figure 113. Ness of Brodgar, approximate phasing (as of summer 2015). Image © Antonia Thomas	145
Figure 114. Decorated and dressed stone recorded from Trench P, 2007-2013. Image © Antonia Thomas	147
Figure 115. Structure 1, S entrance, showing distribution of decorated stones. Image © Antonia Thomas	148
Figure 116. Examples of 'banded' designs from Trench P. Image © Antonia Thomas	149
Figure 117. Examples of opposed-triangle and opposed-fan motifs from Trench P. Image © Antonia Thomas	151
Figure 118. Examples of filled net and lattice motifs from Trench P. Image © Antonia Thomas	152
Figure 119. Examples of pecked curvilinear and protospiral motifs from Trench P. Image © Antonia Thomas	153
Figure 120. Distribution of cup-marked stones in Trench P. Image © Antonia Thomas.	154
Figure 121. Distribution of pick-dressed stones in Trench P. Image © Antonia Thomas.	155
Figure 122. SF11566 in situ at The Ness of Brodgar. Image © Antonia Thomas	157
Figure 123. One of the spoilheaps at the Ness of Brodgar, containing piles of discarded stone from the site. Image © Antonia Thomas	
Figure 124. SF3585. Polished and incised flagstone from Structure 10, the Ness of Brodgar. Image © Antonia Thomas	161
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.	
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.	
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.	
Figure 128. Stones with dragging scars from the Ness of Brodgar. Left: SF6428; Right: SF7141. Both Structure 12. Image © Antonia Thomas	
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	169
Figure 131. Ness of Brodgar, Structure 10. Foundation deposit underlying rubble 4357, SW corner. Image © Antonia Thomas.	170
Figure 132. Ness of Brodgar, Structure 19. Foundation deposit underlying outer (western) wall. Image © Antonia Thomas	170
Figure 133. Ness of Brodgar, Trench P. Fragments and portable decorated stones. Image © Antonia Thomas	172
Figure 134. Decorated stones visible in the main walling of Structure 7/19, the Ness of Brodgar. Image © Antonia Thomas	173

Figure 135. 'Hidden' decorated stones in the main walling of Structure 7/19, the Ness of Brodgar. Image © Antonia Thomas	173
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.	
Figure 137. Rubble 1239 in the centre of Structure 10 as first revealed in 2008 (after 5000 years of settling). Image © ORCA	176
Figure 138. Sequences of Attention on SF8036, Structure 10, The Ness of Brodgar. Image © Antonia Thomas	179
Figure 139. Extract from working sketch matrix for the area around the intramural passage and south entrance of Structure 1, Ness of Brodgar. Image © Daniel Lee	183
Figure 140. Distribution of decorated stones around Structures 1, 7 and 11 at the Ness of Brodgar (detail). Image © Antonia Thomas	185
Figure 141. The south entrance to Structure 1, Ness of Brodgar, before blocking. Image © Antonia Thomas	187
Figure 142. The south entrance to Structure 1, Ness of Brodgar, after blocking. Image © Antonia Thomas	187
Figure 143. Intramural passage between Structure 1 and 11, Ness of Brodgar. Image © Antonia Thomas	188
Figure 144. SF15782 and SF23270 within wall 3079, Structure 8, Ness of Brodgar. Image © Antonia Thomas	189
Figure 145. "Development of the decorative vocabulary through the lifetime of the village with motifs from the earliest contexts at the bottom" (Shepherd 2000, 148, Fig.12.13)	
Figure 146. Depictions of the Brodgar Stone. Image © Antonia Thomas, after (a) Richards 1993a, 195, Fig.8.13; (b) Shepherd 2000, 150, Fig.12.14a; (c) Brown and Chappell 2005, 40, Fig.44.3; and, (d) Bradley et al 2000, 61, Fig.13	191
Figure 147. The Brodgar Stone, as first displayed. Image © National Museums Scotland, with annotations	192
Figure 148. Ground cup-mark on the Brodgar Stone (detail). Image © Antonia Thomas and reproduced by permission of National Museums Scotland.	
Figure 149. Triple-cup motifs from the Ness of Brodgar. From top left: a: The Brodgar Stone; b: SF17506; c: SF11546; d: SF11566; e:SF16599; f: SF6136; g:SF7726; h: SF11560. Image © Antonia Thomas	193
Figure 150. Christopher Gee carving a replica of decorated stone SF23270 with a flint tool. Image © Antonia Thomas	194
Figure 151. 'Portable' cup-marked stones from Structure 12. (a): SF9233; (b): SF10116. Image © Antonia Thomas	195
Figure 152. SF11268, polissoir from Structure 12, Ness of Brodgar. Image © Antonia Thomas	197
Figure 153. Grinding mortars from Structure 10 and 12, the Ness of Brodgar. Image © Antonia Thomas	198
Figure 154. SF16189 during excavation, Structure 12, Ness of Brodgar.Image © Antonia Thomas	203
Figure 155. Distribution of decorated and dressed stone by type, Trench P, Ness of Brodgar. Image © Antonia Thomas	206
Figure 156. Simplified geological map of Orkney showing known Neolithic quarries and the locations of the main sites in the text. Image © Antonia Thomas, based on open-source map data licensed by Creative Commons	207
Figure 157. Re-used, incised roof-slates, Structure 7, Ness of Brodgar. Image © Antonia Thomas	210
Figure 158. Bovid Astragalus and hammerstone tucked within Wall 1322, Structure 10 Annexe, showing the position of decorated stones SF4701 and SF4702. Image © ORCA	
Figure 159. "Designs on the outer walls of Rousay stalled cairns and Unstan pottery" (Callander and Grant 1937, 306, Fig.9) 2	213
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, Skaill Bay. Image © Antonia Thomas	214
Figure 162. Landscape art on a portable piece? SF7870 from the Ness of Brodgar. Image © Antonia Thomas	215
Figure 163. SF18933, annexe, Structure 10, Ness of Brodgar. Image © Antonia Thomas.	217
Figure 164. Entrance to forecourt, Structure 12, Ness of Brodgar, showing position of SF17482 (Looking N). Image © Antonia Thomas	218
Figure 165. Entrance to forecourt, Structure 12, Ness of Brodgar, showing position of SF17482 (looking S). Image © Antonia Thomas	218
Figure 166. Stone pot from Skara Brae, found with ochre in situ. Image © Rebecca Marr.	219
Figure 167. The context of discovery. The Ness of Brodgar during excavation in 2014. Image © Hugo Anderson-Whymark 2	221
Figure 168. SF7530 during post-excavation recording. Image © Antonia Thomas	223
Figure 169. Finds bag containing fragments of SF7530. Image © Antonia Thomas	229
Figure 170. Photograph of the Brodgar Stone taken by Peter Leith in 1925 (Reverse side). (Reproduced with the kind permission of Peter Leith)	222

FOREWORD

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.

Material from the excavations at the Ness of Brodgar forms a major part of this book. Fieldwork on the site is ongoing, and I am indebted to Nick Card of the Archaeology Institute, University of the Highlands and Islands, and Director of the excavations, for allowing me unrestricted access to the site archive and, with Peter Marshall of English Heritage and the Times of Their Lives Project, providing up-to-date (and as yet unpublished) information on the radiocarbon determinations for the site. Nevertheless, any mistakes or misinterpretations are my own! The success of the excavations at the Ness of Brodgar is due to the fantastic group of professional and amateur archaeologists, volunteers and supporters from across the world who are involved in the site and it has been a joy to work with such a talented and positive team over the last few years. In particular, Neil Ackerman, Hugo Anderson-Whymark, Jan Blatch, Jo Bourne, Andy Boyar, Tansy Branscombe, Giles Carey, Ben Chan, Sarah Cobain, Mike and Claire Copper, Mark Edmonds, Christopher Gee, Catriona Gibson, Simon Gray, Daniel Lee, Andy Martin, Owain Mason, Dave McNicol, Colin Mitchell, Woody Musgrove, Mic Page, Dave Reay, Georgie Ritchie, Jim Rylatt, Seb Swenson, Anne Teather and Mai Walker have provided many stimulating discussions on site and have humoured me and my strange obsession with barely visible scratches on stones. In the finds shed, and during post-excavation, Martha Johnson, Anne Mitchell, Scott Pike and Roy Towers have likewise been sources of endless help and useful information. Back at the college, Neil Ackerman, Christopher Gee, Michael Sharpe, Lorraine Sharpe and Woody Musgrove greatly helped with post-excavation work on the Ness of Brodgar stones.

Maeshowe and Skara Brae are Properties in Care and I am extremely grateful to Historic Environment Scotland and their staff for allowing me to undertake survey work at these sites. In Orkney, Alan Jones and Mary Dunnett, managers at Maeshowe and Skara Brae respectively, were extremely obliging to my requests for access. At Maeshowe, Moira Moncrieffe in particular was always accommodating, knowledgeable and thoughtful. Her company enlivened many a cold, damp Sunday morning spent inside the tomb. Also at Historic Environment Scotland, Rona Walker, Regional Collections Manager (North) kindly allowed me to access the display cases at the Skara Brae Visitor Centre, and Adrian Stanger and the Orkney Monument Conservation Unit ("the squad") at Hatston, Kirkwall, arranged access to the Skara Brae stones stored there. Stephen Watt, Historic Environment Scotland's District Architect, generously supplied CAD drawings of Maeshowe and Skara Brae for my fieldwork. The *Scottish Ten* team, in particular Colin Muir, Robbie Nuttall, Lyn Wilson and Maureen Young provided laser scan data and training, and detailed information about Maeshowe and Skara Brae. The Historic Environment Scotland *HNOWHS* Rangers Sandra Miller and Elaine Clarke have been unfailingly helpful and friendly and have likewise cheered many site visits during my fieldwork over the last few years. Jane Downes, Mark Edmonds, Adam Lee, Daniel Lee, Rebecca Marr and Georgie Ritchie assisted at Maeshowe and Skara Brae at various times and I am grateful for their help and second opinions in the field.

At Orkney College, Mark Littlewood, Geomatics Officer (ORCA Marine), and James Moore, of the Archaeology Institute, have provided much-needed assistance with ArcGIS, RefWorks and other software. I am grateful to them, and other friends, colleagues and students within the Archaeology Institute for help and interesting conversations over the past few years. Also at Orkney College, Anette Andersen and Tracey Cooper have always responded efficiently to my requests for inter library loans of obscure journals, and Julie Gibson, Orkney County Archaeologist, has provided access to, and advice on, the Orkney Sites and Monuments Record.

At Orkney Library and Archives, Lucy Gibbon, David Mackie and Linda Somerville have always been sympathetic to my requests for information and have allowed the reproduction of Figures 2, 13 and 74 from the Tom Kent Photographic Archive. The staff in the search room at the National Monuments Record Service in Edinburgh were similarly obliging during my visits and have allowed the reproduction of Figures 8 and 65. Also in Edinburgh, the staff at the National Museum of Scotland have provided much assistance. Alison Sheridan, Principal Curator of Early Prehistory, has been consistently supportive in not only allowing access to Orkney material held by the Museum, but also in her helpful and quick responses to my many email requests for information. Jim Wilson, Assistant Curator, was also of great help in enabling access to decorated stones on display at the Museum during my visits. Alexandra Shepherd has

been extremely helpful in sharing her in-depth knowledge of Skara Brae and its assemblage of decorated stones, and provided information and insights from her research. I am truly appreciative of her continued help with this work.

Peter Leith's 1925 image of the Brodgar Stone provided the springboard for many of the ideas in this book. Being able to speak to his son, Peter Leith junior, about the image has been hugely inspiring and I am grateful to Peter for many thought-provoking discussions. Some of the text in the Prologue and Epilogue, which discuss Leith's image of the Brodgar Stone, were presented at the Royal Anthropological Institute conference *Photography and Anthropology* in May 2014 as part of the Photography and Archaeology session, and I would like to thank the session organisers Dan Hicks and Lesley McFadyen for the opportunity to take part and the discussions which arose out of it.

I am also grateful to Lynda Aiano, Babette Barthelmess, Rodrigo de Balbin Behrmann, Richard Bradley, the late Anne Brundle, Mimi Bueno Ramirez, Ann Clarke, Andrew Cochrane, Tim Edensor, Rose Ferraby, Andy Jones, Neil Leask, Roy Loveday, Tom Muir, Janette Park, Frances Pelly, Colin Richards, Guillaume Robin, Jeanne Bouza Rose, Kate Sharpe, Ole Thoenies, Elizabeth Shee Twohig, Sigurd Towrie, Aaron Watson, Alice Watterson and Bryce Wilson for stimulating conversations about stone, art, Neolithic Orkney and more besides.

It is a special person indeed who can not only provide professional photographic training and assistance but also childcare and friendship. Rebecca Marr has been an unwavering help through what has been a difficult few years and this work would not have been possible without the kind-heartedness and generosity of her and Mark Jenkins. I am also indebted to the Binney, Lee, Thomas and Thompson families for their support over the last few years; Kate and David in particular, your kindness has meant so much to me.

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.

PROLOGUE

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.

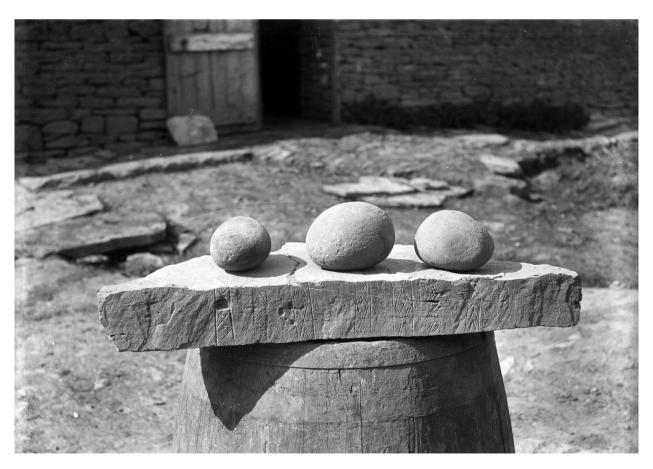


FIGURE 2. THE BRODGAR STONE PHOTOGRAPHED BY TOM KENT IN 1926 (REPRODUCED WITH THE KIND PERMISSION OF ORKNEY LIBRARY AND ARCHIVES).

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 'readymade', 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, pickdressing, 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

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 archaeological (drawn, written, photographic) work and archival research. The same basic methodology was followed throughout, and is discussed below, but the specific exigencies of each site required their own approach and these are detailed 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 Brodgar 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*

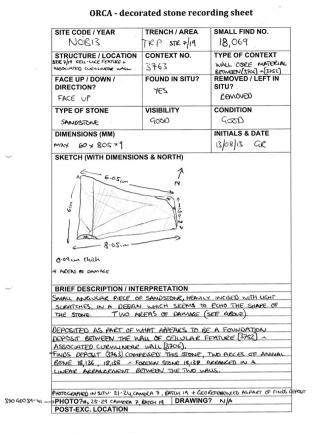


FIGURE 3. EXAMPLE OF A DECORATED STONE RECORDING
SHEET USED AT THE NESS OF BRODGAR (REPRODUCED WITH
THE KIND PERMISSION OF ORCA).

recording sheets. Stones with solely pecked or cupmarked 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*.